

CONSUMERS RESEARCH

Bulletin



June 1948

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CONSUMERS' RESEARCH



Vol. 21 • No. 6

BULLETIN

June 1948

Off the Editor's Chest

TO DRIVE A CAR that had the latest thing in streamlined fenders, chromium grille work and trim, and an impressive instrument panel with a wide variety of dials, lights, and gadgets was, in pre-war days, essential to many a man's sense of well-being, and his car was likely to be his favorite topic of conversation. The man of the household showed as much interest in getting a car with "the new look" and the most advanced gadgetry as the feminine members of his family in selecting the most fashionable of Easter bonnets.

During the war, however, when only the favored few could obtain new cars, there developed a sounder attitude toward the family automobile, which came to be regarded more as a functioning mechanism than as a matter of personal or family prestige. The impressive, big eight-cylinder job that was the envy of the neighborhood in peacetime sat in the garage of the owner with an A-ration sticker for considerable periods of time, because it was often capable of giving only eight or ten miles to a gallon of gasoline. Smaller, less expensive cars that gave a gasoline consumption of 15 miles to the gallon, or better, came to be appreciated. With gasoline supplies expected to be not overly abundant for several years, the farsighted car owner will continue to be guided in his selection of a car by its economy of operation and maintenance. During the war years, also, car owners discovered that a good reboring job on the engine or installing a new engine in an old car provided them with several more years of reliable, economical transportation. Today, when the prices of new cars will

average around 70% higher than they were 10 years ago, and with the most sought-after makes and models hard to get, the man who wishes to get the most for his transportation dollars will be well-advised to continue these thrifty practices. One of CR's automobile experts points out that, from the standpoint of actual service (not style), it is far better to buy an old car of a recommended, time-tested make and spend several hundred dollars fixing it up, than to purchase one of the new makes, readily available, which have been in production too short a time to have all the "bugs" (and some are quite troublesome) worked out of their design.

The troubles reported on one newly-designed car, according to our informant, have generally been of two classes, engines and bodies. The engines, especially in the earlier production, were below par due to sloppy manufacturing methods such as laxity in holding to tolerances, improper fitting of parts, and poor inspection. The difficulties with bodies he attributes to the shortage of steel and the need to use whatever was available, including steel sheets that were inadequately heat-treated and which, as a result, had a tendency to warp and twist.

Even dealers of long-established makes of automobiles are having their troubles (and very considerable expense) putting new cars into proper operating condition after they are delivered, but the problems of the dealer handling a newly-de-

(Continued on page 31)

Scientific and Technical Experts and Editors: F. J. Schlink, R. Joyce, M. C. Phillips, Helen P. Alleman, A. R. Greenleaf, Charles L. Bernier, and Dwight C. Aten. **Editorial Assistants:** Mary F. Roberts and B. Beam.

Symbols used to indicate sources of data and bases of ratings: A—recommended on basis of quality; AA—regarded as worthy of highest recommendation; B—intermediate with respect to quality; C—not recommended on basis of quality; CR—information from Consumers' Research's own tests or investigations; 1, 2, 3—relative prices, 1 being low, 3 high. Note that price and quality are completely differentiated in CR's listings; a quality judgment is independent of price; 47, 48—year in which test was made or information obtained or organized by the staff of Consumers' Research.

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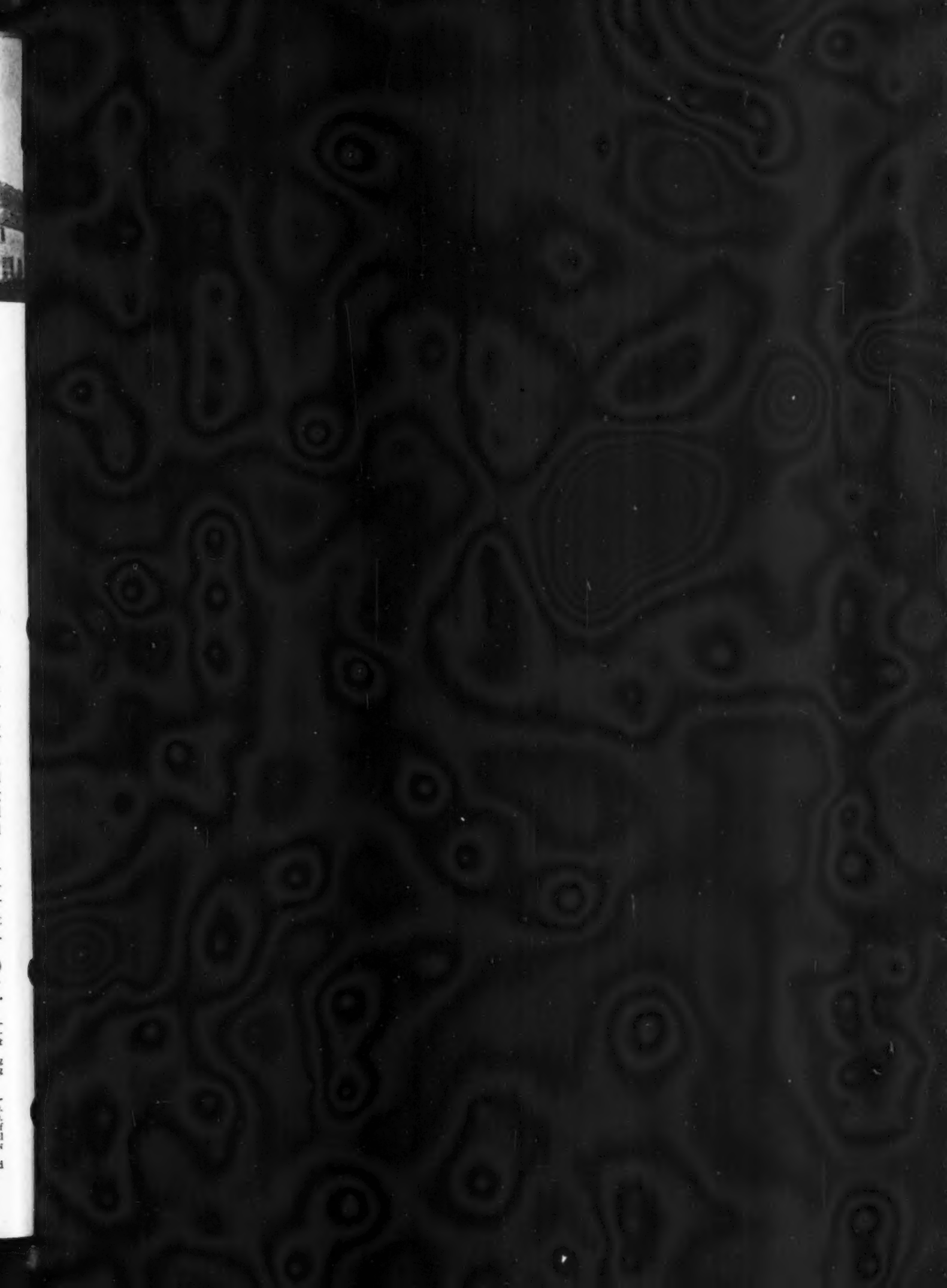
CR will, of course, gladly change addresses for men and women in the services as often as required by changes in station and other circumstances.

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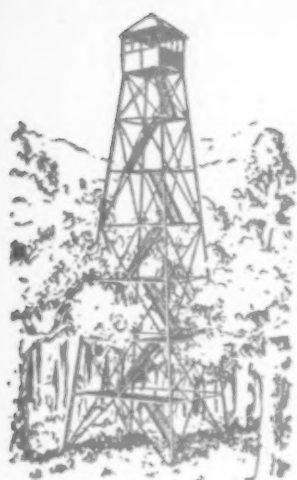
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The Consumers' Observation Post

FILLET OF SOLE AMANDINE may be a rare delicacy as served in a swank French restaurant, but it is still fish to the average American, and his preference is 17 to 1 for red meat. The fishing industry, according to The Wall Street Journal, is planning to put on a big publicity and advertising campaign to get people to eat more fish. One reason for this activity is that foreign countries are stepping up their exports to this country in order to get much-sought-after dollars, and are cutting prices. The

fishing industry wants to increase the consumption of fish to gain sufficient volume of business to absorb the U. S. catch and foreign imports. One angle that is expected to be stressed is that fish is cheaper than meat. The Wall Street Journal points out that in early April in the San Francisco market, fillet of sole was selling for 65 cents a pound and sliced cod at 40 cents, compared with New York steak at \$1.29, hamburger at 55 cents, and pork roast at 62 cents a pound. But who considers codfish, or even sole, to be in a class with steak? And any number of people find properly-cooked hamburger of good-quality beef quite superior to either kind of fish. We venture to predict that it will take more than a big advertising campaign to put cod on the average dinner table once a week. In fact, it will need a price reduction to something like 20 cents a pound before it again becomes a boarding-house Friday night special.

* * *

NEW HOUSEHOLD APPLIANCES continue to be a headache for dealers, because so many are delivered from the factory with mechanical defects. In some cases the trouble appears to be due to faulty inspection and lack of painstaking, responsible work on the assembly line. Consumers will be well advised to make their purchases of major appliances from a dealer with a good service department, in the opinion of an appliance parts wholesaler reported by Electrical Merchandising. One factory service director interviewed by the magazine suggested that the demand for appliances was so great that factories thought they could sell anything including units that in pre-war days would be sent back for check-up. Since consumer demand for appliances is noticeably slowing up and manufacturers are making plans to push high-pressure sales campaigns, perhaps they will also discover the desirability of making certain that all appliances are in first-class condition, before sending them out.

* * *

MINERAL OIL widely used as a laxative is not completely harmless as was once thought. When taken orally near mealtime, it interferes with body absorption of provitamin A and fat-soluble vitamins A, D, and K, whence it interferes with the utilization of calcium and phosphorus. There is also evidence that indiscriminate administration of mineral oil to infants may be followed by aspiration of the mineral oil and subsequently lipoid pneumonia. The Food and Drug Administration now takes the position that mineral oil sold as a laxative should bear some warning on the label such as: "Caution: To be taken only at bedtime. Do not use at any other time or administer to infants, except upon the advice of a physician."

* * *

THE TWENTY PERCENT WARTIME LUXURY TAX on cosmetics is beginning to show a noticeably unfavorable effect on sales, reports The Drug and Cosmetic Industry. It is estimated that over 80 percent of American women use three different cosmetics and over 70 percent use over five different cosmetics. If the price of the five totaled something like \$4, the tax would amount to 80 cents, and that would make a sizable contribution to the upkeep of our mounting bureaucracy in Washington these days. Women who are inclined to take the negative method of

showing their dislike of the tax imposition by cutting down on their purchases will do well to supplement this tactic by the more positive action of writing their congressmen and senators that it is time to repeal such wartime measures, especially now that cosmetics are not luxuries, but necessities, for most women.

* * *

SOME 250,000 ELECTRIC RANGES in the under-\$200 price-group were shipped in 1947, according to figures from the National Electrical Manufacturers Association. This represents 36 percent of the 700,000 shipped in all. These figures were made public in answer to complaints of dealers (reported in CR Bulletin, February 1948, p. 4) that sales were dropping because they were stocked with too many ranges in the \$300 and up class. It would appear that the less expensive ranges are available, and consumers who definitely do not want to pay for the gadgets and more elegant appearance of the so-called de luxe models should by doing a bit of looking be able to locate the cheaper ranges.

* * *

IT IS THE SEASON OF THE YEAR in some sections of the country when home gardeners are hard at work. Where gardening activities are chiefly concentrated on putting the lawn in shape, the St. Louis Better Business Bureau has a word of warning. It appears that there are itinerant "humus" or "fertilizer" vendors who drive their loaded trucks around residential sections looking for a victim. Their technique is to persuade the man working on his lawn that certain bare spots need an application of a few bushels of their particular product and since the average person has no idea how many bushels it will take, or if he does not stay around to count the actual number of bushels supplied, he will likely be presented with a whopping big bill of \$20 to \$45, or whatever the salesman thinks he can collect.

* * *

SUGAR is likely to be higher in price in the near future if sugar growers are successful in bringing pressure to bear on the Secretary of Agriculture to cut the U. S. quota. It appears that there is so much sugar available that the workings of the law of supply and demand would likely push the price down. In setting the sugar quota, the Secretary of Agriculture in effect sets the price we all must pay, but he doesn't ask the taxpayers for their opinion on that very important matter. If the quota is larger than estimated U. S. requirements, the price will go down; if the quota is set somewhat below the maximum estimated needs, the price will be kept up. This somewhat oversimplified statement of an extremely complex bit of price manipulation may serve to show to trusting consumers who thought that the federal government just needed sufficient authority to keep prices of necessities down to a low level that when such power is granted, it can be and is worked either way. In this connection it may be noted that the 1948 quota early in January was set at 300,000 tons lower than that in effect for last year, a move that has already brought the charge from some quarters that the government has been working to keep sugar prices up.

* * *

ADVERTISEMENTS are now being sugar-coated by a new technique of personalized presentation. In the New York Herald Tribune, for example, there appears "Buy-Lines by Nancy Sasser," described as "a weekly sponsored column of things advertised and interesting." Among the products discussed in enthusiastic terms is Richard Hudnut Enriched Creme Shampoo which is referred to as "a brand new kind of shampoo, made with just the right amount of real egg in powdered form . . . real old-fashioned egg that makes this a shampoo that's super-mild and gentle to your locks." Whether the use of a "real old-fashioned egg" in the weekly shampoo is a felicitous suggestion may occur to the more critical reader as a reasonable question. It has been popularly supposed that it is the white of a fresh egg which will give the hair some temporary gloss when used as or with a shampoo, although the well-known dermatologist Dr. William Allen Pusey holds that there is nothing to be gained by this practice. In any event, the Hudnut shampoo is in labeling trouble with federal authorities, who charge that there is only a minute proportion of egg in the product.

(The continuation of this section is on page 29)



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Bicycles



WITH the automobile and gasoline supply situation approximating normal, the bicycle has retrogressed from the position of importance in the transportation field which it held briefly for short-distance travel during the war. Bicycling is doubtless a healthy sport and might well be indulged in to a greater extent by adults in this country as it has been for years everywhere in Europe, but it is not a practicable means of covering the considerable distances many Americans find it necessary to travel daily in all kinds of weather.

There will always be groups of enthusiasts who use bicycling as a pleasant outdoor sport.



Royal Enfield, Light Weight Sports

Such people appreciate the better-grade light-weight bikes, usually of English manufacture. The fine workmanship and superior materials of these bicycles make them much more expensive than the general run of American-made machines which have been developed primarily for boys and girls to ride. Both types of bicycles, however, were included in those purchased by CR for test.

The bicycles were rated on the following characteristics:

1. Strength or rigidity of frame and forks as judged from deflections under standard conditions of measurement in thousandths of an inch per 100 pounds of load. As the greatest deflection was less than 0.1 inch per 100 pounds

(the fork deflection of the *Raleigh*), the frames were judged to be of satisfactory rigidity, though differences were definitely measurable. In addition, each frame was loaded to 800 pounds.

2. Quality of materials and workmanship of the pedal-crank hangers and front axles. This was determined by the hardness of the cones, number of balls in bearings, and finish of bearing surfaces. Hardness measurements were made.



Raleigh Dawn Tourist No. 12

3. Quality of steering heads and their bearings. The head is the part of the frame into which the front fork and handle bar stem are fitted. Heads of greater length and larger di-



Cadillac, Model S21

ameter are stronger, and greater rigidity was achieved by adequate reinforcement. The number of balls and finish of bearing races were also considered in judging quality of the heads.

4. Hardness of sprockets was measured and finish of working surfaces was noted.

5. Quality of chains was judged on pitch and width; of mudguards, on adequacy of at-

tachment and support; of saddles, on spring suspension and materials; of saddle posts, on finish, construction, length, and diameter.

6. The bicycles were given an allover inspection to judge character of workmanship and finish, including painting, plating, frame welds, etc.

7. Gear. This is the relation between turns of the crank and the forward distance traveled per turn. Gear is computed by multiplying the diameter of the rear wheel measured at periphery of the tire, in inches, by the number of teeth in the front sprocket and dividing this product by the number of teeth in the rear sprocket. The *Challenger* bicycle, for instance, has a wheel whose diameter measures 26 inches over the tire, its front sprocket has 24 teeth, and the rear sprocket has 10. $\frac{26 \times 24}{10} = 62.4$, the gear of this bicycle. A gear between 65 and 70 is considered best for most riding, but lower gears are helpful on hills and rough roads. Gear values that are appreciably above 70 are intended for fast or long-distance riding on level, smooth roads.

8. Rolling resistance. A rough measure of rolling resistance was determined under conditions which actuated hanger bearings and rear-wheel bearings. The rolling resistance so determined, of the English-made bicycles was exceedingly low—about one-half—as compared with the average American cycles.

In all, 25 characteristics were evaluated on each sample and used in making the ratings, and information in the listings is necessarily very greatly condensed.

Bicycles were for men unless otherwise indicated. Ratings are cr48.



Colson



J. C. Higgins, Model 4512



Challenger



Columbia Comet



National



Rollfast

A. Recommended

Raleigh Dawn Tourist No. 12 (Raleigh Cycle Co., Ltd., Nottingham, England) \$72; **Dynohub**¹, \$8.50 extra. Weight, 39 lb.; 23-in. frame; gear, 60.5. Equipped with **Dunlop War Grade** 26 in. x 1.375 in. tires. Leather saddle of excellent quality. Well designed bicycle showing exceptionally fine workmanship. Had **Sturmey-Archer** 3-speed hub and hand-operated rim brakes. Rigidity of frame much below average. Head length and reinforcement were satisfactory but diameter was small. Rolling resistance low (very good). **3**

Royal Enfield Light Weight Sports, Ladies' (Enfield Cycle Co., Ltd., Redditch, England) \$79.50. Weight, 35 lb.; 23-in. frame; gear, 66.5. Equipped with **Dunlop War Grade** 26 in. x 1.375 in. tires. Had caliper-type hand-operated rim brakes (desirable). Artificial leather saddle of satisfactory quality. Frame well designed and excellently finished. Rigidity of frame about average. Head length was satisfactory but diameter was small and reinforcement poor. Rolling resistance exceptionally low (excellent) (partly due to the fact that hub had no coaster brake or 3-speed gear). **3**

B. Intermediate

Cadillac, Model S21, Ladies' (Shelby Cycle Co., Shelby, Ohio) \$45. Weight, 42 lb.; 19-in. frame; gear, 62.5. Equipped with **Pharis Lightning** 26 in. x 2.125 in. tires. Artificial leather saddle of below-average quality. Finish very good. Had **Bendix** coaster brake. Rigidity of frame at forks, above average; at hanger, somewhat below average. Head dimensions and reinforcement, satisfactory. Rolling resistance low (very good). **1**

Colson (The Colson Corp., Elyria, Ohio) \$42.50. Weight, 47 lb.; 18-in. frame; gear, 67.5. Equipped with **Goodyear All Weather** 26 in. x 2.125 in. tires. Artificial leather saddle of satisfactory quality. Painting somewhat uneven. Had **New Departure**² coaster brake. Rigidity of frame well above average. Head satisfac-

tory, but number of balls was low. Rolling resistance about average. **1**

J. C. Higgins, Model 4512 (Sears-Roebuck's Cat. No. 6-4512) \$41.50, plus transportation. Weight, 51 lb.; 19-in. frame; gear, 67.5. Equipped with **Allstate Crusader** 26 in. x 2.125 in. tires. **Higgins** coaster brake. Artificial leather saddle of below-average quality. Frame well designed and finished. Rigidity of frame considerably above average. Steering head was rather short, but had satisfactory diameter and reinforcement. Rolling resistance highest of any make tested (undesirable). **1**

Challenger (Arnold, Schwinn & Co., 1718 N. Kildare Ave., Chicago) \$52.95; higher on the West Coast. Weight, 49.5 lb.; 18-in. frame; gear, 62.5. Equipped with **Gillette Bear** 26 in. x 2.125 in. tires. Artificial leather saddle of satisfactory quality. Finish, fair to good. Had **New Departure** coaster brake. Rigidity of frame well above average. Head, satisfactory. Rolling resistance fair. **2**

C. Not Recommended

Columbia Comet, Ladies' (Westfield Mfg. Co., Westfield, Mass.) \$45. Weight, 43 lb.; 18-in. frame; gear, 62.5. Equipped with **U. S. Royal Chain** 26 in. x 2.125 in. tires. Artificial leather saddle of satisfactory quality. Finish, fair to good. Had **New Departure** coaster brake. Rigidity of frame at forks, about average; at hanger, below average. Head, longest of those tested and of large diameter, but reinforcement was poor and number of balls was low. Rear wheel mount was poor and construction of forks was faulty. **1**

National (Huffman Mfg. Co., Dayton, Ohio) \$45. Weight, 43 lb.; 18-in. frame; gear, 62.5. Equipped with **Goodyear All Weather** 26 in. x 2.125 in. tires. Artificial leather saddle of below-average quality. Finish, good. Had **Musselman** coaster brake. Rigidity of frame at forks, considerably below average but better than **Raleigh**; at hanger, about average. Head, short, and details of its construction, poor. **1**

Rollfast (D. P. Harris Hardware & Mfg. Co., N.Y.C.) \$45. Weight, 43 lb.; 19½-in. frame; gear, 62.5. Equipped with **U. S. Royal Chain** 26 in. x 2.125 in. tires. Artificial leather saddle of below-average quality. Finish, fair. Had **New Departure** coaster brake. Rigidity of frame at forks, about average; at hanger, considerably above average. Head, short; details of construction, poor. **1**

¹The **Raleigh Dynohub** is a 6-volt electric generator built into the front hub, connected to front and rear light. Output 2 watts. This is a desirable addition for those who need to cycle at night; and is judged to represent a big improvement over the common lighting current generators driven by a small wheel running in contact with the tire. Silent in operation, only slight added resistance to motion.

²The **New Departure** coaster brake was judged to be easily the best of U.S. made coaster brakes with which the American bicycles in the test were equipped.

Outboard Motors

REGARDLESS of how efficient an outboard motor may be, it can only deliver a certain definitely limited amount of power; thus it is important to select a motor with a horsepower rating actually suited to the boat to which it is to be attached. (A motor which is too large for a given boat can be just as unsatisfactory as one which is too small.)

Horsepower ratings are certified by the Outboard Boating Club of America, the ratings being known as O.B.C. Certified Brake Horsepower. Reputable dealers usually have information available that will enable anyone to select the size of engine most suitable for his boat. Most users who require an outboard motor for use with a small rowboat or canoe for fishing, etc., will probably find their needs cared for by motors in the range of $2\frac{1}{2}$ to 5 h.p.

The majority of outboard motors in the sizes of interest to consumers are of the two-cycle type (two-strokes-per-cycle of operation) which is more compact, has fewer parts, considerably less weight per horsepower, and better balance than a corresponding four-cycle motor. The chief difference between the two types of motors is that in the two-cycle engine the mixture of gasoline vapor and air is compressed in the crankcase before passing into the cylinders for ignition. This necessitates a gas-tight crankcase and precludes the use of the usual method of oiling found in automobile engines. For two-cycle outboard motors, it is necessary to add lubricating oil to the gasoline, and as the gasoline vapors pass through the crankcase, oil in the vapors washes and lubricates the cylinder walls, bearings, and moving surfaces.

Tests were made on four leading brands of motors of approximately similar horsepower and included the following:

1. *A break-in test* which consisted of a 5-hour run at reduced speeds (1000 to 1300 rpm.) using the fuel mixture recommended by the manufacturer. Motors were mounted on a tank of water with propellers submerged 8 in., observations being made on ease of starting and other details of performance.

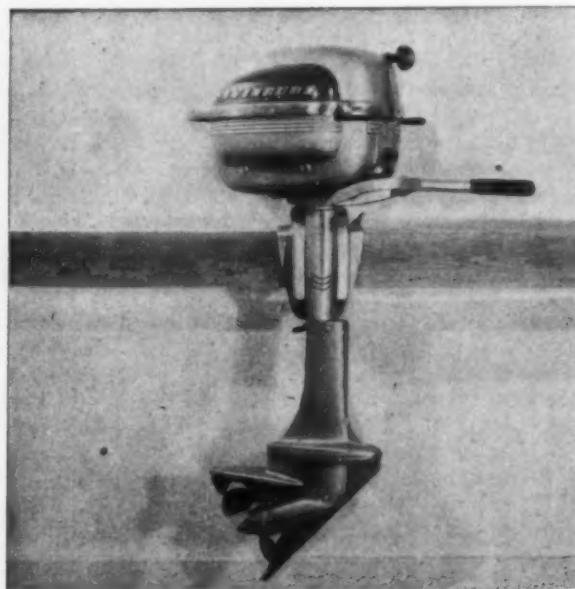
2. *Field performance tests.* Motors with fuel tanks full to capacity were mounted on a 12-ft. flat-bottomed rowboat. Tests to deter-

mine fuel consumption, maximum and minimum speeds, ease of motor installation and handling, vibration, noise, etc., were made on an industrial canal having high sides which provided shelter from the wind. Several runs over a test course 528 ft. in length were made both up and downstream, allowances being made for the effects of the current.

3. *Tear-down examination.* At the conclusion of tests 1 and 2, the motors were completely dismantled and all parts examined for details of construction and workmanship.

A. Recommended

Evinrude Sportwin (Evinrude Motors, Milwaukee) \$141.50.
2-cylinder, 2-cycle, alternate-firing motor. Rated h.p., 3.3 at 3500 rpm. Weight, 39 lb. Pistons, aluminum alloy with 3 rings. Piston displacement, 6.6 cu. in. Fuel tank capacity, 3 qt. Gasoline to oil ratio, 24 to 1. Speed in miles per hour: maximum, 6.1; minimum, 0.74.



Miles per hour per h.p., 1.82. Average fuel consumption, 0.32 gal. per hour. Ease of mounting, starting, and carburetor adjustment, very good. Responded well to the throttle and gave smooth, quiet operation at all speeds. Idled exceptionally well. Mechanical examination showed good design and sturdy construction which, coupled with unusually low piston speed of 800 ft. per minute, should favor long life. Engine was somewhat difficult to dismantle due to its two-piece construction, but a satisfactory instruction manual was provided. Judged to be the best of the 4 motors studied. The 2 h.p. *Evinrude Sportsman* would also be rated A on the basis of a careful comparison of published specifications.

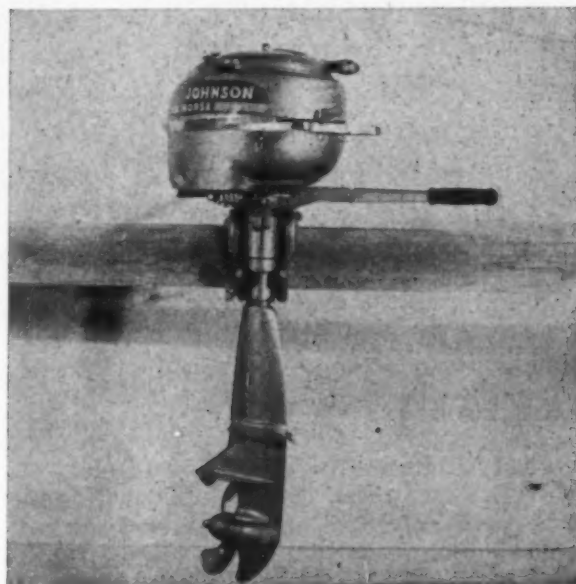
Brand	Rated h.p. at Stated rpm.	Bearing Area in sq. in. per h.p.	Weight lb.	†Maximum Speed m.p.h.	†Minimum Speed m.p.h.	m.p.h. per h.p.	Average Fuel Consumption gal. per hr.	Fuel Consumption gal. per hr. per h.p.	Fuel Tank Capacity qt.	Gas to Oil Ratio	Price	Price per h.p.
<i>Evinrude Sportwin</i>	3.3 @ 3500	1.9	39	6.1	0.7	1.8	0.32	0.10	3.5	24 to 1	\$141.50	\$43.00
<i>Johnson Seahorse HD</i>	2.5 @ 4000	3.1	31	5.2	1.0	2.0	0.39	0.16	2.4	16 to 1	121.50	48.60
<i>Mercury Comet Deluxe</i>	3.6 @ 4000	1.3†	36	6.7	1.6	1.7	0.45	0.12	5.0	16 to 1	134.50	37.40
<i>Martin "40"</i>	*3.8 @ 4000	1.7	37	6.6	1.8	1.7	0.38	0.10	2.5	16 to 1	148.50	39.20

*Now advertised at 4.5 horsepower at 4300 rpm.

†As needle bearings are used in this motor, the low figure is not unfavorable.

‡Maximum and minimum speeds are function of boat size, shape, load, etc.

Johnson Seahorse, Model HD (Johnson Motors, Waukegan, Ill.) \$121.50. 2-cylinder, 2-cycle, alternate-firing motor. Rated h.p., 2.5 at 4000 rpm. Weight, 31 lb. Pistons, aluminum alloy with 2 rings. Piston displacement, 4.08 cu. in. Fuel tank capacity, 2.44 qt. Gasoline to oil ratio, 16 to 1. Speed in m.p.h.: maximum, 5.15; minimum, 1.02. Miles per hour per h.p., 2.0. Average fuel consumption, 0.39 gal. per hour. Ease of mounting, poor, due to lack of handles. Some-

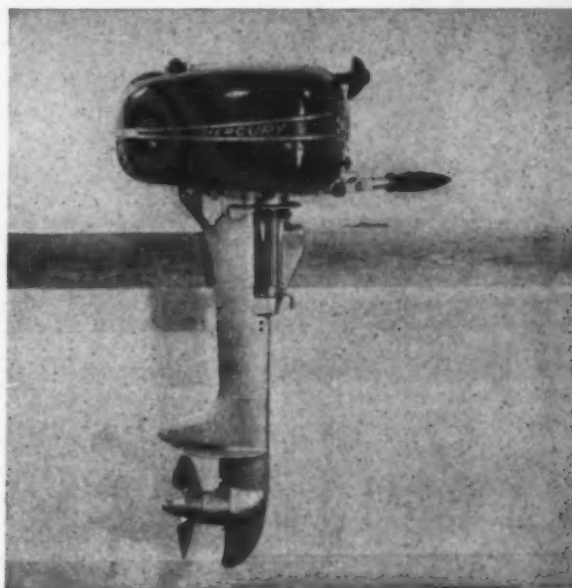


what difficult to start. Motor performed well in field tests but not with such uniform satisfaction as *Evinrude*. Did not run as fast as others, owing to its less power, and minimum speed was higher than *Evinrude*. Was smooth running at all speeds. Engine performance was good, but least economical of fuel on gallons per hour per h.p. basis. Mechanical examination showed no serious defects except for extra complexity of carburetor system.

Bearing area per h.p., far greater than any other engine with plain bearings (desirable). Sturdy construction coupled with low piston speed of 915 ft. per minute should result in long life. Engine easy to dismantle and work on. Instruction manual, satisfactory. Judged to be a very good engine but not the equal of *Evinrude* in general ease of use and small details that make for owner satisfaction. The 5 h.p. *Model TD* is essentially similar to *Model HD* tested except for changes to increase power, and it is believed would also warrant an *A* rating.

B. Intermediate

Mercury "Comet" Deluxe, Model KE-3 (Kiekhaefer Corp., Cedarburg, Wis.) \$134.50. 1-cylinder, 2-cycle motor.

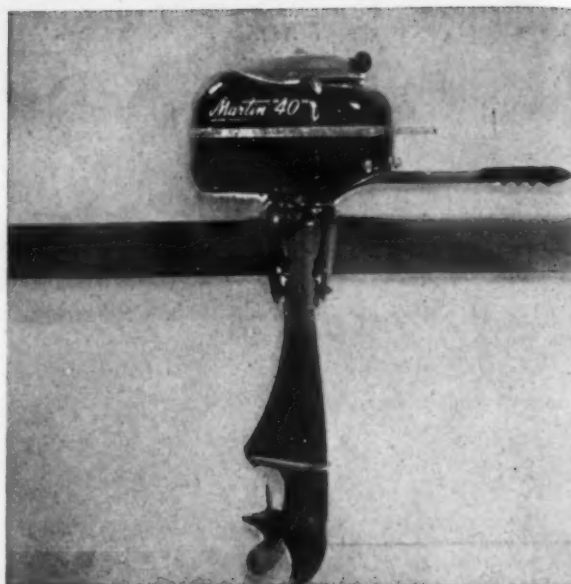


Rated h.p., 3.6 at 4000 rpm. Weight, 36 lb. Piston, aluminum alloy with 3 rings. Piston displacement,

5.5 cu. in. Fuel tank capacity, 5 qt. Gasoline to oil ratio, 16 to 1. Speed in m.p.h.: maximum, 6.67; minimum, 1.58. Miles per hour per h.p., 1.69. Average fuel consumption, 0.45 gal. per hour. Ease of mounting, fair; of starting, very good. Performance in field tests, very good except for vibration, which at low speeds was very severe. Motor cannot be used for trolling and is not recommended for this purpose by manufacturer. An exceptionally well made motor, but design was such that removal of connecting rod, cylinder block, or crankshaft required use of special tools and instructions; manual provided had only the most general sort of information. The 2-cylinder, 6 h.p. *Mercury Rocket* appears to be substantially similar in design features, plus added cylinder, and needle bearings on underwater parts and would probably warrant an A rating.

C. Not Recommended

Martin "40" (Martin Motors, Division of National Pressure Cooker Co., Eau Claire, Wis.) \$148.50. 2-cylinder, 2-cycle, alternate-firing motor. Rated h.p., 3.8 at 4000 rpm. Weight, 37 lb. Pistons, aluminum alloy with 2 rings. Piston displacement, 5.76 cu. in. Fuel tank capacity, 2.5 qt. Gasoline to oil ratio, 16 to 1. Speed in m.p.h.: maximum, 6.55; minimum, 1.76. Miles per hour per h.p., 1.69. Average fuel consumption, 0.38 gal. Ease of mounting, poor, due to lack of handles. Difficult to start when cold, but started readily after being warmed up. Considerable trouble in break-in test, and required repairs before field tests could be made. Greatest amount of vibration at high speed



of any motor tested and could not be throttled down for any length of time without stopping. Economical in use of fuel. Rather light construction and relatively high piston speed did not suggest the long service life some other makes should give. Had far greater number of parts than other motors tested, but was fairly easy to dismantle, using owners' manual. The *Martin "60"*, rated at 7.2 h.p., appears to be essentially similar to the "40."

Two Jar, Can, and Bottle Openers

THE *E-Z-Lift* cap-lifter made by Stewart Products, Inc., 200 Varick St., New York City (25c), is a useful device designed to open paint cans, food jars, ketchup bottles, or any containers, including many vacuum-sealed jars and bottles, of types whose manufacturers direct the user to open by prying up around edge with the back of a table knife. A notch suitable for opening *Crown* caps on beverage bottles is in one of the handles. The gadget works like a pair of pliers in reverse; the points are thin and flat so that they can be inserted in small openings; once in place, a squeeze of the handles separates the flattened points. With small caps, this opening of the jaws is enough to lift the top; but with large paint cans, or those on which the top adheres tightly, it is necessary to exert downward pressure on the handles, using the whole device as a lever, to remove the lid. The tool is easier to use than most of the makeshifts resorted to to accomplish the same end, and the lids are left undamaged, ready for re-use. This is an advantage, especially for the many cans which it is important to be able to close

very tightly to prevent deterioration or evaporation of contents.

Master-Key (Northmore's Home Products, Highland Park, Ill.), 50c, is another type of opener. It is a flat piece of metal having one flared end with an opening shaped to fit over *Crown* caps and a tapered end with two slots to accommodate the narrow opening strips or tongues of flat (sardine) cans and short round (crab meat) cans. The device seems to work satisfactorily for the uses mentioned. The wide end can also be used to pry up lids of containers as mentioned under *E-Z-Lift*. Keys supplied with sardine, meat, and other food cans never seem to be long enough or wide enough to give the user much grasping surface, disadvantages which this tool would overcome. The price is far too high for what is involved, however, and should discourage sales except to the most gadget-minded until a reduction takes place. The item might be a good 10-cent store seller, and a 10-cent price should provide an ample margin for profit, even in today's market.

Automatic Washing Machines

THE amount of interest in automatic washing machines, as judged by subscribers' inquiries, is very great, and it would appear the advertising men have done a good job in making housewives dissatisfied with washers of the conventional sort. Leader in automatic washer advertising is Bendix, whose recent full-page ads proclaim that tests conducted by the Pittsburgh Testing Laboratory show the *Bendix* to be superior to three non-automatic washers in washing effectiveness and germ removal. Such advertising no doubt has given a brisk push to the trend toward automatic washers.

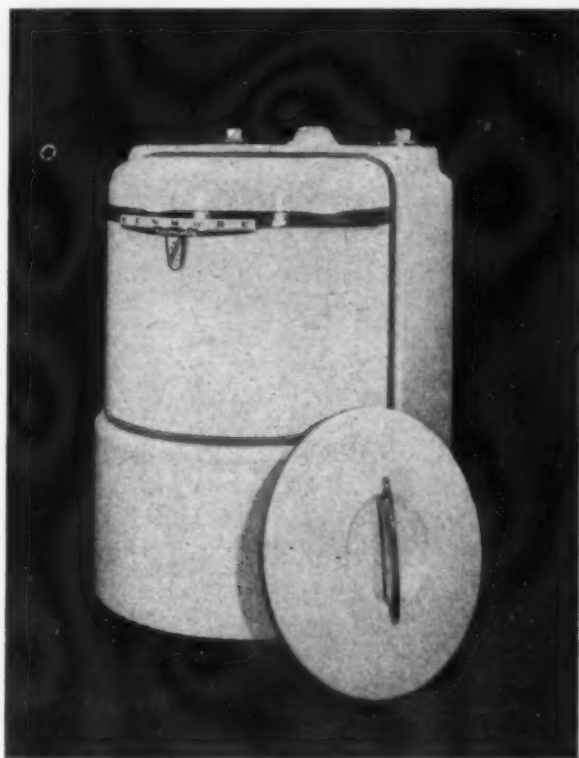
Unfortunately, CR's tests and the experience of many housewives using the *Bendix* under average

point which the great majority of the readers of the advertising would not note.

The temperature of the water used in the *Bendix* was 160°F, but in the non-automatic machine it was only 125°F, or 35° lower. Under such conditions, not only would the *Bendix*, with its considerably higher water temperature, be expected to rid the clothes of more bacteria, but its washing effectiveness or soil removal ability should have been much higher than if the temperature of its wash water had been at 125° as it was in the conventional washers tested at the same time. The temperature of the domestic hot-water supply of the majority of homes will be under or around 140°, or at most 150°, which means that the actual temperature of the wash water, due to losses in piping, heat absorbed by machine, etc., will be not much above 125°; the hot-water supply system of few homes, indeed, will be able to supply wash water at a dependable average temperature anywhere near 160°.

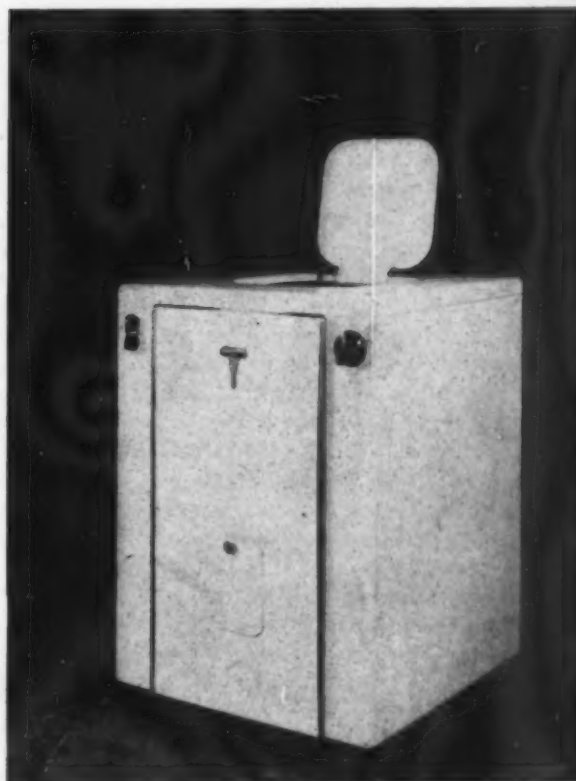
* * *

The following report covers three agitator-type machines, *Blackstone*, *General Electric*, and *Kenmore*; one "plunger" type, *Frigidaire*; and presents the final judgment on the *Westinghouse Laundromat C-3 47*, a



Kenmore

home conditions do not bear out the statement that the *Bendix* outwashes leading non-automatic machines. Indeed, CR's tests have shown, and many housewives who have washed with the *Bendix* will know from practical experience, that the *Bendix* type of washer is less rather than more efficient in cleansing dirty clothes. This does not mean that the Pittsburgh Testing Laboratory's findings were "phony" or that Bendix directly misstated the facts; it appears rather that the test methods used gave an unfair advantage to the *Bendix* machine, a



Blackstone, Model 50A

Brand	Water Consumption, Gallons		
	Hot	Cold	Total
<i>Kenmore</i>	20	12	32
<i>Frigidaire</i>	18	10	28
<i>Blackstone</i>	20	14	34
<i>General Electric</i>	30	10	40
<i>General Electric</i> , with pre-soak	34	22	56
<i>Laundromat</i>	14	6	20
<i>Laundromat</i> , with pre-soak	18	14	32
<i>Bendix</i>	12	10	22
<i>Bendix</i> , with pre-soak	16	14	30
<i>Launderall</i>	16	18	34

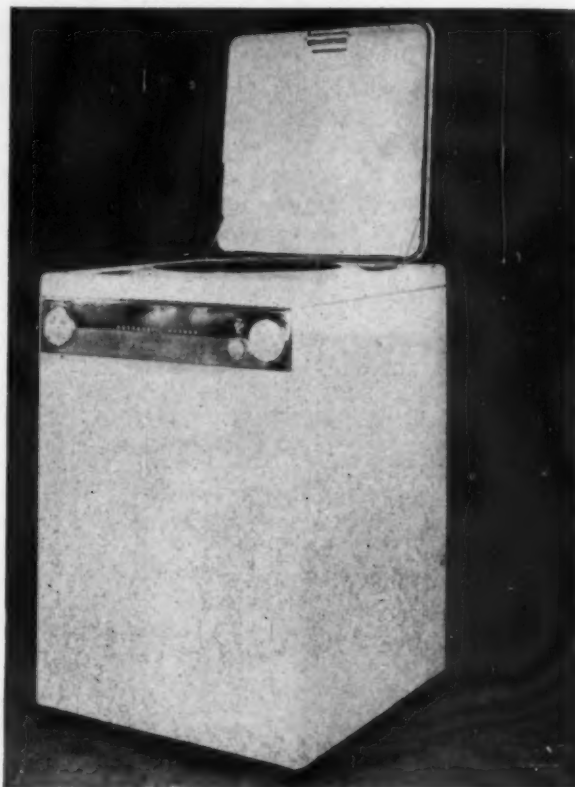
Note: Figures in the table are round numbers only, as actual water consumption will vary considerably with temperature of hot-water supply and with piping conditions affecting pressure, etc.

revolving-drum washer. In addition, comparative washing effectiveness tests were made of the *Bendix*, *Launderall*, and *Laundromat* under carefully controlled conditions. These latter tests were made at the request and at the expense of the F. L. Jacobs Company, manufacturers of *Launderall*, who were not satisfied with the correctness of findings in washing effectiveness previously made and reported by CR on the *Bendix* washer. The results obtained in this test were not significantly different from the results obtained on *Bendix* and *Launderall* (which had been studied in CR's previous tests); indeed the differences in washing effectiveness between the three revolving-drum type machines, *Bendix*, *Launderall*, and *Laundromat* were actually small, whereas the washing effectiveness of each was considerably less than that of washers using an oscillating- or plunger-type agitator (typified by *Kenmore*, *Blackstone*, *General Electric*, and *Frigidaire*).

One of the most serious objections to automatic machines first offered to consumers has been the amount of vibration caused by the load being off balance during the spin or dewatering cycle. In some cases this has required that the machines be firmly bolted to a solid floor. In the revolving-drum type of automatic washers, speed of the drying operation has been kept much lower than that of the non-automatic spin-dry machines in order to reduce the centrifugal forces to a value where they can be absorbed; in the *Laundromat*, which does not require bolting to the floor, the vibration is absorbed by suspending the inner tub on springs and rubber supports. When the agitator- and plunger-type machines are fully loaded, the clothes are usually fairly well distributed at the beginning of the spin cycle with the result that the vibration ranges from slight to moderate. Tests showed, however, that with a partial and unbalanced load, the vibration in *Kenmore*, *Blackstone*, *General Electric*, and *Frigidaire* was considerable. Speeds of the rotating tubs in the drying cycle for the various machines were as follows: *General Electric*, 1170

rpm.; *Frigidaire*, 1140 rpm.; *Blackstone*, 530 rpm.; *Kenmore*, 520 rpm.; *Laundromat*, 477 rpm.; *Launderall*, 375 rpm.; *Bendix*, 350 rpm.

Where a washer requires currents above 15 amperes for an appreciable time (more than a few seconds) the installation of special heavy-load wiring may be necessary (see comment in listing of *GE* regarding its maximum current drain).



Frigidaire

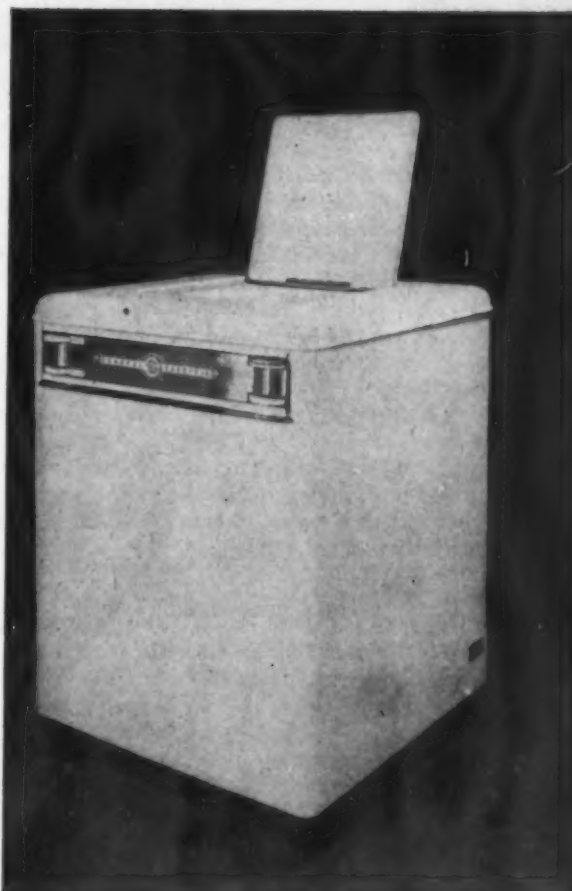
Agitator or Plunger Type

A. Recommended

Kenmore (Sears, Roebuck & Co., Philadelphia; made by Nineteen Hundred Corp.) \$249.95. Size, 35½ in. high, 23½ in. wide, and 26 in. deep. Water input temperature controlled by knob marked "Hot," "Medium," and "Warm." Operation completely automatic after starting, but period of any cycle can be changed by manually operating control knob. Complete cycle consists of: fill, 4 minutes; wash, 20 minutes; drain, 2 minutes; spin and flush rinse, 4 minutes; fill, 3 minutes; rinse, 2 minutes; drain, 2 minutes; spin, 6 minutes; for a total of 43 minutes. If desired, wash water can be saved for re-use by pumping into a near-by tub. At the end of cycle it can be pumped back into tub by setting dial to "Suds return." A separate hose discharges rinse water. Machine is supported on four small adjustable metal feet, and requires bolting to floor with two bolts. Maker's capacity rating, 9 lb. of clothes. Required 20 gal. of hot water, 12 gal. of cold water, or a total of 32 gal. per cycle. Maximum current drawn, 6.8 amperes; maximum power input, 470 watts

(both low, which is desirable). Energy consumption per cycle, 178 watt-hours. Washing effectiveness, very good, best of all machines so far tested, and superior to *Maytag*, Model E2-LP, non-automatic washer reported in May 1946 Bulletin. Drying effectiveness, good (water left in clothes, 76% of the weight of the dry clothes). Vibration during normal washing and dewatering operation, slight; with unbalanced load (see text), vibration during dewatering operation considerable and machine would not come up to maximum speed. Gears were very noisy at beginning of spin-dry cycle. As received, mixing valve which controls temperature of water did not function properly, and it was necessary to have that assembly replaced. Satisfactorily completed endurance test of 150 cycles except for some rusting of rear frame, top cover handle bolts, and inlet water tube housing. Wear on clothes, slight. On the basis of information so far available (which does not include reports of experience in field and the way servicing is handled), judged the best of the seven automatic washing machines so far tested by CR. **2**

Blackstone, Model 50A (Blackstone Corp., Jamestown, N. Y.) \$285. Agitator type. Cabinet, rectangular in shape, 25 in. square, 36 in. high. Temperature of water manually adjusted before wash and rinse cycles by two knobs marked "Hot" and "Cold." Tub is filled by turning a control knob. Washing period is selected after tub is filled by advancing control knob again. From then on operation is automatic. Complete cycle consists of: fill, 4 minutes; wash, 15 minutes maximum; drain, 1.5 minutes; spin, 6 minutes; fill, 2 minutes (filling continues through rinse cycle); rinse, 3.5 minutes; drain, 1.5 minutes; spin, 7.5 minutes; for a total of 41 minutes. Water drained through rubber hose and belt-driven drain pump. Mechanism, including inner tub, positioned on four large rubber supports to minimize vibration. Machine supported on four flat metal feet, adjustable for height, and does not require bolting to floor. Maker's capacity rating, 8 lb. of clothes. Required 20 gal. hot water, 14 gal. cold water, or a total of 34 gal. per cycle. Maximum current drawn, 24.8 amperes; maximum power input, 2550 watts (both for a few seconds only). Energy consumption per cycle, 222 watt-hours. Washing effectiveness, very good, approximately same as that of non-automatic *Maytag* E2-LP. Effectiveness in drying clothes, good (water left in clothes, 83% of the weight of the dry clothes). Vibration during normal washing and dewatering operation, slight; with unbalanced load (see text), vibration during dewatering cycle considerable. In case of power failure while water valves are open, water entering tub will drain by gravity, but if pressure is higher than 25 lb. per sq. in. (flowing), draining will be at too slow a rate, and water will spill. Drain pump somewhat noisy during wash cycle. Drain cleanout cover gasket permitted considerable leakage of water. Motor contacts sparked considerably at start of spin cycle, giving off odor of burnt insulation. Control dial handle very difficult to turn. As received, machine was defective in that motor would not come up to full speed. After considerable delay, motor was replaced by manufacturer. Satisfactorily completed endurance test of 150 cycles except for water leakage already noted and some rusting of drive mechanism frame and rear support bolts. Wear on clothes, slight. The model tested has now been superseded by *Model 150* at \$345. The later model retains



General Electric

the basic construction and mechanical design of *Model 50A*. **2**

Frigidaire (General Motors Corp., Dayton 1, Ohio) \$314.75. Plunger-pulsator type. Cabinet, rectangular in shape. 25 in. square, 38 in. high. Water inlet temperature controlled by switch marked "Hot" and "Warm." Control dial permits changing length of period of any operation. Complete cycle consists of: fill, 2.5 minutes; wash, 10 minutes; spin and drain, 2 minutes; fill, 2.5 minutes; rinse, 2.5 minutes; spin and drain, 2.0 minutes; fill, 2.5 minutes; rinse, 2.5 minutes; spin and drain, 3 minutes; for a total of 29.5 minutes. Plunger-type pulsator used in place of conventional agitator consisted of a lower 10½-in. diameter plunger and an upper 5-in. diameter plunger fixed on a 4-in. diameter frame axle, which operates at 366 cycles per minute over a distance of 1¾ in. A perforated section of the axle serves as a soap dispenser cup. Differing from most washing machines which have a removable front and back, the sides and front of the *Frigidaire* are of a single sheet with rear frame welded to the sides. This construction with watertight bottom permits the cabinet to be used as a large overflow tank from which the drain water is pumped. Machine does not require bolting to floor. Maker's capacity rating, 8 lb. of clothes. Required 18 gal. of hot water, 10 gal. of cold water per cycle. Maximum current drawn, 24.2 amperes; maximum power input, 2380 watts (both for a few seconds only). Energy consumption per cycle, 203 watt-

hours. Washing effectiveness, very good (about the same as the exceptionally efficient non-automatic *Maytag E2-LP*). Drying effectiveness, excellent (water left in clothes only 51% weight of dry clothes). Vibration during normal washing period, slight; during dewatering operation, moderate; with unbalanced load (see text), considerable, machine wobbled violently and operated "amplitude safety switch," shutting off motor. Leakage current under high humidity conditions, somewhat above CR's tolerance; however, a good safeguard was provided in that electric ground wire was built into cold-water inlet hose. Noise during operation, moderate. It was possible to start machine accidentally by leaning against control. Clothes were sometimes twisted and tangled after complete cycle. Satisfactorily completed endurance test of 150 cycles except that "amplitude safety switch" which shuts off machine during spin cycle if load becomes too much unbalanced shut off the machine six times during the test; bolts which secured inner clothes basket to outer tub worked loose. Wear on clothes, slight. 3

B. Intermediate

General Electric (General Electric Co., Bridgeport, Conn.) \$329.75. Agitator type. Cabinet, rectangular in shape, 27 in. square, 35 in. high. Water inlet temperatures controlled by knob marked "Hot," "Medium," and "Warm." Another control knob permits selection of length of washing period (3 to 20 minutes). Complete cycle consists of: fill, 5.5 minutes; soak, 3 minutes; spin and drain, 3.5 minutes; fill, 5 minutes; wash, 20 minutes (maximum); drain, 1.5 minutes; spin, flush rinse, and drain, 6 minutes; fill, 4.5 minutes; rinse, 4 minutes; spin and flush rinse, 10.5 minutes; empty, 3 minutes; for a total of 66.5 minutes. Soak cycle can be omitted if desired, reducing total time to about 55 minutes. Water is admitted through soap dispenser tray. During spin cycle, water is drained by centrifugal force into outer tub from which it is either discharged through drain hose or pumped back into inner tub, according to operation in progress. Three motors are used, one to drain water, one to circulate water, and one to drive agitator. Machine is mounted on three composition casters. Maker's capacity rating, 9 lb. of clothes. Required 30 gal. of hot water, 10 gal. of cold water. With soak cycle included, required 34 gal. of hot water, 22 gal. of cold water. Maximum current drawn, 16.6 amperes (high, but would not be objectionable for the short period involved); maximum power input, 1150 watts. Energy consumption per cycle, 582 watt-hours. Washing effectiveness, very good, about the same as *Blackstone*. Inclusion of soak cycle did not significantly improve washing effectiveness. Drying effectiveness, excellent (water left in clothes, only 46% of weight of dry clothes). Vibration during normal washing and dewatering operation, moderate; machine wobbled and tended to travel on its casters while getting up to full speed in spin-dry cycle, but was stationary at full speed (with unbalanced load, vibration was considerable—see text—and machine would not come up to full speed). Casters caused grooving of linoleum floor covering after several cycles of endurance test. Drain pump somewhat noisy. Brake squeaked loudly as tub came to rest at end of spin cycle. Small articles of clothing were occasionally wedged under upper rim of

tub where they could not be seen during unloading. Soap in dispenser sometimes caked instead of dissolving. Satisfactorily completed endurance test except for rusting of screws and metal washers used in outer tub construction. Wear on clothes, slight. Except for large hot-water consumption and tendency of casters to wear floor covering, this washer would warrant an A rating. 3

Cylinder-Type Automatic Washers

The housewife will need to bear in mind that the rotating-cylinder type automatic washers are not as effective in cleansing dirty clothes as either the non-automatic machines, or the automatic machines of the agitator or plunger type. Whether the rotating-cylinder washer will serve in a given case will depend upon the individual requirements, the availability of help in the laundry, the homemaker's personal standards as to required whiteness of the finished wash, whether most of the clothes are badly or slightly soiled. (Standards of required whiteness of laundered articles are probably lower in cities and towns where water is hard to very hard, where a great deal of soft coal is burned, or there is much factory smoke, for in such locations it is difficult to obtain relatively complete removal of sooty particles in any case, and a degree of grayness of fabric may necessarily be tolerated.)

B. Intermediate

Bendix (Bendix Home Appliances Inc., South Bend, Ind.) Standard, \$249.50; de luxe, \$269.50. The company has announced prices will be reduced \$50 when 1948 models are announced. "Automatic," rotating-cylinder type. Maker's capacity rating, 9 lb. Required with pre-soak cycle, 16 gal. of hot water, 14 gal. of cold. Effectiveness in washing, only fair; in drying, fair. Ease of operation, excellent; over-all construction, good; ease of cleaning and minor servicing, good. Electrical leakage current under high humidity conditions was small. 2

Laundrall Model LS-1 (F. L. Jacobs Co., Detroit) \$299.95. Fully automatic, rotating-cylinder type. Maker's capacity rating, 10 lb. of dry clothes. Required 16 gal. of hot water, 18 gal. of cold water per cycle. Washing effectiveness, only fair (see *Bendix*). Effectiveness in drying clothes, good (about the same as *Maytag*). Wear on clothes, about average. Vibration both during washing and spin-drying, considerable. In endurance test, squeak developed when cylinder was rotating; driving belt broke after 48 cycles. After belt was replaced, test was completed without further evidence of wear. Door on front of machine through which access was obtained to mechanism, lacked any locking device, such as a self-locking latch; omission would seem to involve hazard to a small child who might open the door and get his hand caught in the moving belt. Cleaning of tub, difficult. Ease of servicing, about average. 3

Laundromat, Model B-3 47 and Model C-3 47 (Westinghouse Elec. Corp., Mansfield, Ohio) \$299.95. Fully automatic, rotating-cylinder type. Maker's capacity rating, 9 lb. of dry clothes. Cabinet, 37 in. high, 31 in.

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Cumulative Index for Consumers' Research Bulletins

January 1948 through June 1948

(Vol. 21, No. 1 through Vol. 21, No. 6)

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receivers and tuners, FM, faulty		
low-priced table models	Jan...	8
recorders, wire	Jan...23-25*	
table-model clock	June...	21*
television, table-model	June...	22*
tuner, AM	June...	24*
AM-FM	Feb...	16*
Ranges, gas	Mar...	5-10*
Rat control methods	Mar...	12-15*
Recorders, wire	Jan...23-25*	
Refrigerators, four electric	Mar...16-18*	
Rhubarb, protection for teeth	Jan...	3
Rubber footwear, men's and women's	Apr...9-10*	
Rugs, Oriental, sales tactics	May...	3
Rugs and carpets, selection, care — II	Jan...16-18*	
S apphires and rubies, star, synthetic	Jan...29-30	
Scale, baby	Apr...10; 29-30	
Sheets, crib, waterproof	June...19-20*	
Shirt, man's white	Apr...	19*
Shoes, children's	May...5-8*	
price rise	Feb...	4
waterproofer for soles	June...	30
Skin, discolorations, removal	Feb...	4
Soap, substitute	Mar...	38
powdered, with newly-advertised ingredient	Jan...4, 29	
vs. synthetic detergents	May...	3
Stain remover kit	Apr...	12
T anks, aluminum, fuel oil storage	June...	29
septic, circular available	June...	29
Telescope	Mar...	38
Television, faults	Feb...24-25*	
table-model	June...	22*
Thermometer, freezer cabinet	May...	30
Thermometers, clinical, as source of infection	Jan...	4
Thread, sewing	Jan...12-13*	
Tires, automobile	Jan...19-20*	
Toilet seats for babies	Jan...25-26*	
Tooth decay, prevention	Feb...4, 29	
Tooth pastes and powders, dental decay	June...	29
V acuum cleaners	Jan...9-11*; May...21-22*	
floor-polishing attachments	Feb...13*	
Vitamin D, excessive use harmful	Apr...	3
Vitamins, synthetic, declining sales	Feb...	4
W ashing machines,		
automatic	Feb...5-6*; June...11-14, 17*	
availability of parts	May...	25
non-automatic power-wringer	June...	23*

Automatic Washing Machines

(Continued from page 14)

wide, 26 in. deep. Had toe recess at front of base. Tub, inner basket, motor, pump, and some automatic mechanism were suspended as a unit by 3 coil springs and held in position by 5 flat springs. Machine did not require bolting to floor or permanent connection to water drain and electrical supply. Washer broke down during endurance test and was replaced by a *Model C-3 47*. Maximum current drawn, 6.4 amperes. Energy consumption per cycle, 287 watt-hours. On "Regular Hot"

dial setting, average amount of hot water used by *Model C-3 47* for 1 complete cycle, 14 gal.; total amount of water, 20 gal. Washing effectiveness, only fair (approximately the same as *Bendix*). Effectiveness in drying clothes, good; water left in clothes, 77% of dry weight. (Vibration and noise during this operation though considerable, was not objectionable, because of manner of suspending and positioning of tub.) Operation of "look-in" door, somewhat inconvenient, due to small clearance permitting knuckles of hand to collide with soap chute. Control dial was difficult to operate, requiring a force of $17\frac{1}{2}$ lb. to push in, $7\frac{1}{2}$ lb. to pull out. This dial was not securely fastened, coming off twice in operator's hands during test, causing temporary loss of small intricate assembly parts. Some leakage of water at rubber gasket of "look-in" door. Wear on clothes, slight, but some twisting and tangling occurred. Satisfactorily completed endurance test except for squeaking of rubber suspension snubbers. 3

★★★ Pianotune—A Toy Piano ★★★

THE *Pianotune*, advertised as a "Junior size, fully chromatic piano" (built by Typatune, Inc., 170 53 St., Brooklyn 32, New York), selling at \$25, resembles a miniature grand piano and stands 22 in. from the floor, with maximum width $18\frac{1}{2}$ in., depth 17 in. The frame is made of some kind of soft wood painted a dull cream. Each white key is $13/16$ in. wide (piano keys are $7/8$ in.); each black key is $5/16$ in. (piano $3/8$ in.). The span of the octave measures $6\frac{3}{4}$ in. as compared to $7\frac{1}{4}$ in. on a piano keyboard. There may be some advantage to these reduced measurements, but only for very small children. Experienced piano teachers find the standard keyboard not beyond the capacity of children, even those who begin their study at an early age.

Fastened on the inside cover of *Pianotune* is a series of $1/8$ -in. metal rods about $1/8$ in. in diameter, arranged to sound the correct tones. Small felt-covered hammers function by simple leverage to strike these bars when the keys are struck. As to the sound, there is no resemblance at all to that of a piano. The effect is something like that of a tiny glockenspiel. Naturally, the technic of playing on this keyboard is radically different from that used on a piano. The keys

are not perfectly level, which is a not surprising fault of a frail instrument of this sort. Another basic fault is that the *Pianotune* examined was not even set to the proper pitch, being a whole tone lower than standard (C sounds B flat, etc.). A range of only two and a fourth octaves is available.

It is considered that the instrument is not ruggedly enough made to be of value to a very young child, for it is likely to get broken or damaged with mishandling. On using it, the hammers easily got stuck and the respective key then would not sound. (This was with gentle use.) To restore to playing condition, it was necessary to take out six screws, remove the top board, and return the balky hammer to position.

Educationally, the *Pianotune* is not of any importance. Youngsters who are old enough to learn to read music should begin on a full-sized piano where touch may be learned correctly, and adequate range is available, and there is a correct pitch for each musical tone.

If the product were correctly represented and sold at a considerably lower price, say 8 or 9 dollars, it could have some value and interest, but as a toy though one of rather doubtful durability.

Lipsticks—CR's Report on Ten Brands

LIPSTICK is now considered such an important factor in women's make-up that nearly 28 million dollars is reported to have been spent on the stuff in 1945. There are some 160 brands on the market, of which about a dozen are widely sold. According to The Drug and Cosmetic Industry, lipstick is used by 95 percent of the women in this country, with the heaviest users in the 17 to 25 year age group. The younger woman, the trade journal reports, seems to prefer an oily lipstick of flashy color; the older woman, one which slightly enhances the natural color of the lips.

The technical aspects of lipstick formulation are not of interest to the average user of this cosmetic, but there are a few items of technical quality characteristics that she needs to keep in mind, for they bear directly on her problem of making a satisfactory choice. In practice, the melting point of a particular brand determines its softness. A stick with too low melting point will be soft and can be applied more easily, but it may have a tendency to be smeary. A stick with a higher melting point will be harder, and may be slightly more difficult to apply, but it will stay on better than one which is oversoft.

It is considered desirable at the present time that color in lipstick have a certain lasting quality when it is applied to the lips. This effect has been somewhat misleadingly described as "indelible," and it is achieved by the use of one or more of the bromo acids (tetrabromofluorescein and dibromofluorescein) which leave a pink stain on the lips. While this type of dye is particularly effective as a coloring agent, it has a decided disadvantage in another respect in that it causes an unpleasant allergic reaction in some users. The symptoms of this irritation include excessive dryness of the lips, swelling, redness, and eruptions of the skin. Perfumes, other coloring materials than bromo acid, and the base of the lipstick itself may also be a cause of contact dermatitis of the lips. In such cases the wisest solution is to give up the so-called indelible lipsticks altogether and content oneself with one of the non-

indelible type (which does not stay on too well) or one of the rose pomade sticks.

In order to provide some basis for evaluating the quality of lipsticks now on the market, CR selected 10 widely-distributed brands for tests to determine their melting points, ease of removal, permanency of stain on fabrics with which they accidentally come in contact, smoothness, and uniformity in accordance with procedures outlined in Testing League Bulletin T-32, put out by The U. S. Testing Co., Hoboken, N. J.

In addition, an animal injection test was made with each brand to discover whether a particular brand might have some irritating effect on normal skin. This test is by no means conclusive for it does not evaluate the effect of lipstick which has been applied over a skin cut or abrasion, but it is recognized as a useful preliminary measure for screening out kinds most likely to give trouble in normal use. The three lipsticks in the present test which showed positive reactions in the animal injection test were given a *C-Not-Recommended* rating without consideration of their other qualities, since there is an obvious possibility that some women may experience an unpleasant reaction from their use.

The purchase of lipsticks was made chiefly at drugstores and the prices given are those paid, exclusive of the federal excise tax of 20 percent. In making a selection of the shade of lipstick to be purchased, the shopper for CR noted a most unsanitary practice which should certainly be corrected. The sales clerks frequently opened the lipsticks and smeared them across the back of their hands, or in some cases across the back of the shopper's hand, to demonstrate what the shade looked like on application. The possibility of transferring germs to the sensitive membranes of the lips in subsequent use of such lipsticks is not pleasant to contemplate. Discriminating manufacturers would be well advised to evolve some method of sealing their lipsticks to prevent this practice. Who knows but that on occasion an irritation to the lips that occurs from the use of a

particular lipstick may be due not to an unsuitable ingredient in its formula, but to the unsuspected contact with another person's bacteria?

Ratings are cr48.

B. Intermediate

Almay (Distributed by Schieffelin & Co., 16 Cooper Sq., New York 3) \$1.10. Pink Magnolia. Melting point, 65°C (149°F). One of the two most difficult to remove. Permanency of stain, highest of all tested. Smoothness and uniformity, good. Showed no irritation in animal injection test.

Elizabeth Arden (Distributed by Elizabeth Arden, 681 Fifth Ave., New York 16) \$1.25. Red Cactus. Melting point, 69°C (156°F), one of the two highest of brands tested (see text). One of the two most difficult to remove. One of the three highest with respect to permanency of stain. Smoothness and uniformity, poor.

Helena Rubinstein (Distributed by Helena Rubinstein, Inc., 655 Fifth Ave., New York 22) \$1. Heavenly glow. Melting point, 65°C. Fairly easy to remove. Permanency of stain, low. Smoothness and uniformity, good.

Max Factor (Max Factor & Co., Hollywood) \$1. Clear Red No. 2. Melting point, 69°C, one of the two highest of brands tested (see text). Fairly easy to remove. Permanency of stain, one of the three highest of brands tested. Smoothness and uniformity, good.

Prince Matchabelli (Distributed by Prince Matchabelli, Inc. 711 Fifth Ave., New York 22) \$1. Red red. Melting point, 58°C (136°F), lowest of brands tested (see text). Fairly easy to remove. Permanency of stain, lowest of brands tested. Smoothness and uniformity, good.

Revlon (Distributed by Revlon Products Corp., 745 Fifth Ave., New York 22) \$1. Certainly red. Melting point, 67°C (high). Fairly difficult to remove. Permanency of stain, low. Smoothness and uniformity, good.

Tangee (The George W. Luft Co., Inc., 34-12 36 Ave., Long Island City 1, N.Y.) 49c. Medium red. Melting point, 60°C. Fairly easy to remove. Permanency of stain, fair. Smoothness and uniformity, good.

C. Not Recommended

Chen Yu (Distributed by Chen Yu, Inc., 200 E. Illinois, Chicago 11) \$1. Dragon's blood. Melting point, 60°C. Fairly easy to remove. Permanency of stain, low. Smoothness and uniformity, fair. Animal injection test showed slight irritation.

Coty (Coty Inc., 730 Fifth Ave., New York 19) \$1. Medium. Melting point, 64°C. Fairly difficult to remove. Permanency of stain, fair. Smoothness and uniformity, good. Animal injection test showed slight irritation.

Yardley (Yardley of London, Inc., 620 Fifth Ave., New York 20) \$1. Cherry. Melting point, 59°C. Fairly easy to remove. Permanency of stain, low. Smoothness and uniformity, fair. Animal injection test showed slight irritation.

Waterproof Crib Sheets

SINCE CR's 1946 tests, there has been considerable change in types of materials used for making waterproof crib sheets. In the previous project many of the sheets tested were of coated cloth, but films without fabric are now being used quite extensively.

The most important characteristic of a waterproof crib sheet is resistance to water penetration. It should also be resistant to staining, have adequate tensile strength, and should be thin and pliable. Workmanship and miscellaneous details of construction were taken into consideration in CR's ratings.

Waterproof sheets containing fabric must be washed and dried when soiled; films without fabric content can simply be rinsed off, and drying is a matter of a few minutes.

In general, a thin sheet of adequate strength is more desirable than a thick one, as it is more easily handled and is less likely to form uncomfortable wrinkles in the crib. Nylon

thread is best in making crib sheets because of its quick-drying quality. Grommets or reinforcements around holes for ties, etc., are desirable convenience features but were not considered essentials.

All of the sheets tested were found fully resistant to water penetration. Tensile strength of most of the sheets was considered sufficient; comments on this characteristic were not added in listings unless the sheet was especially good or bad in this respect. Size was 18 x 27 in. unless otherwise noted. The price per square foot, in cents, is shown in parentheses following price of the whole sheet. Ratings are cr48.

A. Recommended

All of the sheets rated A showed slight or very slight staining.

Empire, No. 330 (Manufacturer unknown) 39c (11.5). Sold in variety stores. Medium thick synthetic rubber sheet. 1

Harvel Two-Ply (Harvel Rubber Co., Inc., New York City; processed by B. F. Goodrich) 39c (11.5). Medium thick synthetic rubber sheet. 1

Plymouth Perfect Vinylite, No. 3032 (Plymouth Rubber Co., Inc., Canton, Mass.; Sears-Roebuck's Cat. No. 29-5553) 34c (10), plus postage. Very thin plastic resin sheet with heat-sealed binding. 1

Kleinert's Quilted (I. B. Kleinert Rubber Co., N.Y.C.; Montgomery Ward's Cat. No. 31-2682) 73c (21.6), plus postage. A thick all-rubber sheet made of two layers of rubber cemented together so as to form air pockets. Very strong. 2

B. Intermediate

Archer-Tex, Style 4025 (Archer Rubber Co., Milford, Mass.) 65c (9.6). 27 in. x 36 in. Heavy rubber sheet, poorly cut, with three thin spots. Susceptible to staining. 1

Archerite B, Style 306 (Archer Rubber Co.) 25c (11.2). 18 in. x 18 in. A thin vinyl resin sheet. Susceptible to staining. 1

Honeysuckle (Sears-Roebuck's Cat. No. 29-5559) 33c (14.7), plus postage. 18 in. x 18 in. Medium thick muslin with synthetic rubber coating. Very strong. Somewhat susceptible to staining. 1

Plastikool (International Latex Corp., Dover, Del.) \$1.59 (13.5). 36 in. x 47 in. Very thin plastic sheet. Weakest sheet tested; otherwise would have received an A-Recommended rating. Very slight staining. Reinforced at tie holes. 1

Rand, No. 7000 (Rand Rubber Co., Brooklyn, N.Y.) 89c (13.2). 27 in. x 36 in. Fairly thick rubber sheet. Susceptible to staining. 1

Plasticoid (Clarvan Corp., Milwaukee) \$2.79 (28.2). 28 in. x 51 in. A very thin vinyl resin sheet formed to make a cover which would protect ends and sides of mattress as well as upper surface. Comparatively low tensile strength; otherwise would have received an A-Recommended rating. Light staining. 2

C. Not Recommended

Dee's Saftee-Sheet, No. 117 (Givens & Co., Western Springs, Ill.) 69c (10.2). 27 in. x 36 in. Cotton muslin with waterproof coating on one side. Stained badly. Had ties for securing in place. 1

Plymouth Perfect, No. 303 (Plymouth Rubber Co., Inc.) 39c (11.5). Synthetic rubber sheet irregularly cut. Comparatively low tensile strength. Susceptible to staining. 1

Dry-Downe, No. 2365 (I. B. Kleinert's) \$1 (29.6). Two layers of cotton flannel bonded together by sheet of waterproof material making a very thick sheet with highest tensile strength of those tested. Stained very badly. 2

Ward's (Montgomery Ward's Cat. No. 31-2684) 69c (20.4), plus postage. A thick, strong sheet made of flat knit cotton fabric layers bonded to a sheet of waterproof material. Stained very badly. Adhesion of layers was not strong. 2

Gas and Electric Clothes Driers

ARTIFICIAL or speeded-up drying of clothes can be a great boon to the housewife, particularly in the winter and during inclement weather, but the high power or fuel consumption of these devices and other serious disadvantages they possess may well make them a doubtful purchase for the majority of housewives, according to CR's present information.

Automatic clothes driers are of two types: (a) the tumbler type, in which the wet clothes are placed in a perforated basket which revolves slowly; (b) the cabinet type, in which the clothes are hung over rods. In both types air, heated by gas or electricity, circulates through the drying chamber, sometimes with the help of a small fan.

With an average washing machine the regular 9-lb. load of clothes will contain approximately 9 lb. of water after spinning or wringing. It will require about 1000 Btu of heat to remove a single pound of water, which means that if the drying cycle is to require about 45 minutes, heat will need to be supplied at the rate of 12,000 Btu per hour. If the heat is to be supplied electrically, this will require at least 3.5 kilowatts of electrical energy (actually

about one-third more), or about the amount taken by the oven of an electric stove. Accordingly, special wiring will be required, equivalent to the type used for energy supply to an electric range, and the cost of such wiring is considerable. (An average figure might be \$60.)

The GE clothes drier is rated at 4.6 kilowatts, the *Blackstone* at 4.4. The power companies object to loads of this magnitude being suddenly thrown off and on the line, and from the consumer's standpoint it could be inconvenient by causing the lights to flicker sharply and unpleasantly. The *Hamilton* gas-burning drier requires an input of 20,000 Btu per hour (corresponding to about 6 kilowatts electrical input).

All of the moisture that is present in the clothes must be exhausted into the room or into the outside air, and likewise the heat used in the drying process must be disposed of in some way. If exhausted into the air of a small kitchen or laundry at the rapid rate which would be the case with an automatic clothes drier using a large heat input, the rapid flow of water vapor into the air of the house (9 lb. per cycle) can produce very disadvantageous re-

sults, whereas in the small kitchen or laundry the high humidity will be very unpleasant. In the winter, condensation (with possible freezing) of water on windows and walls will occur; in houses without vapor barriers in the walls, condensation of large amounts of water between the walls could occur, and could cause damage to the wood framing; damage by moisture condensation within the cold walls of a house in severe weather is a well-known phenomenon, and with the large amount of water dried out of considerable quantities of clothing, deterioration might be much more serious than could occur under more normal conditions. Whereas in winter, the extra moisture could harm the structure of the house; in summer, the heat and humidity might make working conditions in the home almost intolerable on hot days. An obvious solution would be to pipe the warm moisture-laden air to the out-of-doors, but this has a serious disadvantage in the wintertime of requiring that corresponding amounts of cold air be drawn into the house, and then this cold air must be brought up to comfortable living temperatures with consumption of a considerable extra amount of fuel.

The clothes drier of the tumbler type will abrade from the clothing a certain amount of lint, which is usually caught in a lint trap; it is said that in some makes of driers, the wear on clothes in this tumbling operation may be appreciable; likewise, the lint which is blown out into the room toward the end of the drying operation can be a considerable nuisance.

Two Table-Model Clock-Radios

Two units were tested, each consisting essentially of a small table-model receiver, an electric-powered alarm clock, and a switch for turning on the radio at a pre-selected time. The alarm mechanism could be set to go off a few minutes after the radio was turned on. These clock-radios are priced considerably higher than they ought to be from the standpoint of utility, since the clock and automatic switch feature add an extra \$15 to \$20 over the price of the radio itself (comparable in type and quality with the *Radiola*, Model 61-8, \$19.95, reported in the May 1948 BULLETIN). Both appliances had an "ac-dc" radio chassis, but, because of the clock mechanism, were suitable only for a-c operation.

B. Intermediate

General Electric Radio Alarm Clock, Model 60 (General Electric Co., Bridgeport, Conn.) \$39.95. Brown plastic cabinet. Used 5 tubes including rectifier. Standard broadcast band only. Accessibility for servicing, good. Sensitivity and selectivity, fair to good. Approximate audio response (acoustic), 100 to 3200 cycles, fair. Acoustic quality on listening test considered good. Output power (volume), good, with a minimum of blasting at high output. Current leakage considered excessive, whence set is not recommended for use atop a radiator or in a kitchen or in a home where it would be accessible to a child, because of inadequate electrical safety precautions. Electric clock, apparently manufactured by



Left to right: *General Electric Radio Alarm Clock, Model 60*, and the *Silvertone*.

G. E., was of conventional type, kept accurate time and was quiet in operation. This listing does not apply to another *General Electric* Clock Radio, Model 50 (smaller in size and less expensive, \$31.95), found to have poor selectivity and sensitivity and to use 4 tubes including rectifier in t.r.f. circuit. 2

C. Not Recommended

Silvertone (Sears-Roebuck's Cat. No. 57-08010) \$33.25, plus postage. Brown plastic cabinet. Standard AM broadcast band only. Parts and workmanship, fairly good, although pointer rubbed against dial in several places. Accessibility for servicing, good. Selectivity, fair. Set was not correctly aligned as received and a replacement unit was also very poorly aligned. Approximate audio response (acoustic), 140 to 2300 cycles, poor. Power output (volume), fair. Acoustic performance judged poor in listening tests on both units. Leakage current excessive. The *Telechron Clock Timer* mechanism used kept accurate time, ran quietly, and functioned properly, in its new condition. Although the *Silvertone* is rated *B. Intermediate*, it was not, considered as a radio, judged to be the equal of the *General Electric*, Model 60. 2

Announcement Regarding Forthcoming Report on 1948 Automobiles

WORK on CR's report on 1948 automobiles is proceeding as rapidly as possible. Subscribers should bear in mind that the work is much more difficult than in pre-war years when all the automobiles were announced and readily available for immediate delivery, at about the same time. Several consultants are working on this project and a large mass of data must be obtained, analyzed, and checked, and differences of opinion resolved; all of this takes considerable time. Reports on as many individual cars as possible will appear in BULLETINS within the next few months, until such time as all the data for all the leading cars have been received, at which time comparative ratings in tabular form will be issued.

Subscribers are reminded that if the information on the cars were furnished to our readers before it had been properly studied and analyzed, it might result in many families' buying a car which upon later consideration would prove to be relatively undesirable, or not as good a buy for the money as another. On that

account, there is no possibility of providing reliable information on a given year's cars on a quick-service or casual basis. It takes time and hard study to provide data and recommendations on new automobiles which are reasonably dependable. Information about this year's crop of automobiles that is *timely* can never be completely dependable, for in the nature of things, it cannot include all the qualifications that may later be called for on the basis of fuller data, and experience with the cars on the road. In this connection, it is noted that many subscribers are requesting information on cars which are not actually being delivered; e.g., *Ford '49*, *Tucker*, etc. It is well to bear in mind that no information of real usefulness and dependability can be given about products which are not actually on the market. To see and examine a car which is not being commercially produced cannot give reliable information as to what that same make may be like from a quality and performance standpoint when turned out in mass production a few months or a year or two later.

A Table-Model Television Set

CR has not up to this time reported on any television sets, for reasons which may be briefly stated as the present instability of design of such sets and their extremely high prices. A further consideration was the knowledge that comparatively low-cost sets were soon to be put on the market—sets of the transformerless type—selling in a price range of around \$170 to \$200 plus installation—amounting to about \$35 with an additional amount for a year's warranty. (Some of those are now appearing and are undergoing test.) In the meantime, we are able to present this brief and tentative report on the examination and use of one of the more expensive sets.

A. Recommended

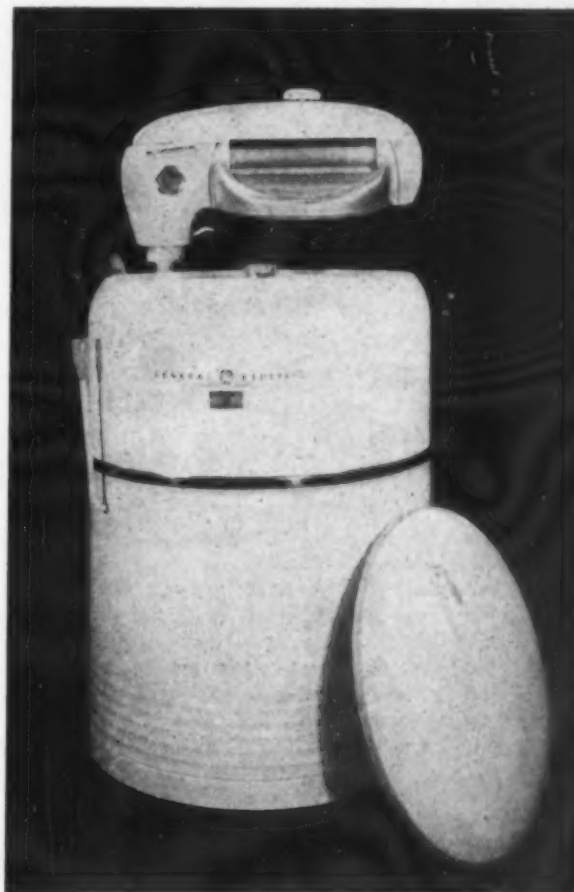
RCA Television Receiver, Model 630TS (Radio Corp. of America RCA Victor Div., Camden, N.J.) \$377.60 plus \$55 installation cost and service for a year. 30 tubes used including rectifiers. Used a 10-in. picture tube (picture size, 6 $\frac{3}{8}$ in. x 8 $\frac{1}{2}$ in.). Wood cabinet with walnut finish, 14 $\frac{1}{2}$ in. high, 26 in. wide, and 19 in. deep. Picture was considered quite stable and set required no adjustment after original warm-up period. Covered the 13 television channels. Audio quality considered only fair. Very recently this Model 630TS has been replaced by a later Model 8TS30, which has a slightly larger speaker and a different cabinet. The later model, however, uses the same tubes and appears not to be changed in any essential characteristics. It is believed that these RCA sets are definitely among the better television sets presently available in their price range.

Non-Automatic Power-Wringer Type Washing Machine

As CR pointed out many times in the past, no washing machine with a power wringer, irrespective of its high qualities in other respects, can properly receive an *A* rating until such time as the designers can find means to equip such machines with a fully dependable, easily-operated, sure-working safety device for preventing serious accidents from the use of their power wringers. No manufacturers of the machines tested by CR have yet done this, and some continue to build machines which do not even meet the requirements of the Underwriters' Laboratories as to wringer release action (which in CR's opinion err rather on the side of liberality to the manufacturer rather than otherwise). CR fully recognizes that there are many who for various reasons feel that they must purchase and use this type of machine in spite of the hazards it involves, and who feel that they can take the necessary precautions to prevent injury to the user, and to children in the home. For such persons, CR furnishes information about another washer of the power-wringer type just tested. We emphasize again, however, that the utmost caution and care is required in operating any such washer, especially to prevent injury to children (who may tamper with the machinery in the mother's absence); *many people have been killed or seriously injured by use of power-wringer washers*, and accidents of this sort are reported quite regularly in the newspapers.

C. Not Recommended

General Electric, Model AWS 332 (*General Electric Co.*, Bridgeport, Conn.) \$149.75. Conventional non-automatic power-wringer type. Agitator type of washing action. Maker's capacity rating, 8 lb. of dry clothes. Required 17 gal. of water. Time required for pump to empty tub, 1¾ minutes. Lacked switch to turn motor on and off, which should have been a part of the appliance. Lacked provision for storing cord when not in use. Controls, except for pump, were convenient to operate without undue bending over, but were not



General Electric, Model AWS 332

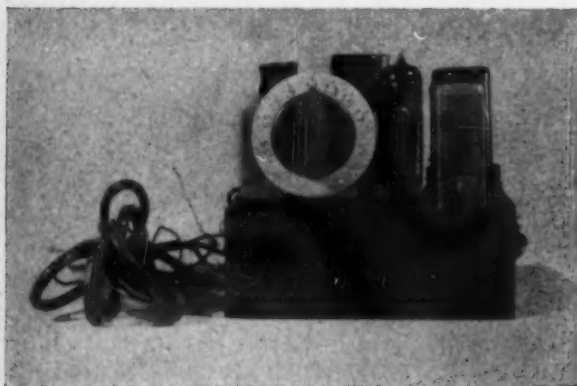
marked to indicate purpose. Washing effectiveness with 15-minute washing period, very good (only slightly below that of *Maytag E2-LP* reported in May 1946 Bulletin). Effectiveness in drying clothes, good. Wear on clothes, slight. Ease of cleaning tub, good. The force required to operate the emergency release exceeded by an appreciable amount the limit set by the Underwriters' specifications; otherwise the washer would have received a *B-Intermediate* rating. Except for some loss of oil to the floor, washer satisfactorily completed 100-hour endurance test.

An AM Tuner

THE following tuner has been nationally advertised in journals read by radio fans and servicemen.

C. Not Recommended

Adaptol AM Tuner, Model CT-1 (Adaptol Co., 120 New Lots Ave., Brooklyn 12, N.Y.) \$12.45. Ac-dc superheterodyne circuit, using 3 tubes (including rectifier). Chassis, no cabinet furnished. Quality of parts, workmanship, and accessibility for servicing, considered fair. Sensitivity varied from poor to fair. Electrical response 20 to 3800 cycles [10 db. down] (good bass but poor treble), and distortion was excessive at high levels of



modulation at the broadcasting station (corresponding to loud signals). Restricted character of *Adaptol's* audio range was readily apparent when tuner was used to feed a wide-range amplifier and speaker. Tone quality would be considered satisfactory when used with amplifier and speaker equipment having only poor or restricted range. Leakage current (shock hazard), extreme. (Conducting shield on output cable tied directly to one side of power line.) This tuner would not be at all suitable for use with any high-fidelity reproducing system.

1

A Table-Model Radio-Phonograph Combination

B. Intermediate

Westinghouse Table Radio Phonograph Combination, Model H-122A (Westinghouse Electric Corp., Home Radio Div., Sunbury, Pa.) \$99.95. Consisted of two separate units, a 6-tube (including rectifier) ac-dc table-model superheterodyne receiver mounted in a plastic case, and a record player with automatic changer mounted in a wooden cabinet. Record player of the combination can be used only on a.c. The small radio (9 in. high, 14 in. wide, 6 in. deep) fits into a compartment in the cabinet and can be taken out for use elsewhere, if desired. (The reverse operation is not quite as convenient as might appear, for care is required in dropping the radio line lead through the slot in the front of the record changer compartment.) ¶Over-all size of combination, 9 in. high, 15 in. wide, and 19 in. deep. Workmanship and accessibility for servicing, good. Sensitivity and selectivity, good. Acoustical range 100 to 4000 cycles (fair), with phonograph power output (volume) excellent for table model (3.4 watts with 10% distortion). (This resulted from the use of two 25L6 beam power tubes in push pull in output circuit.) Acoustical quality in listening tests considered only fair, with a noticeable lack of tone clarity (vibration of plastic radio cabinet and lid of phonograph cabinet contributed to defects of tone quality). Leakage current from radio chassis to ground, 8 ma. (very high). Considerable hum was present when using the phonograph. Record changer (manufactured by General Instrument Co.) played twelve 10-in. or ten 12-in. records, repeating last record. Used *Fidelitone Deluxe* precious metal alloy needle (replaceable) with crystal cartridge; needle pressure 1.4 oz.

3

Binders for CR's Bulletins

THE following two styles of binders, suitably imprinted for Consumers' Research material, are available to subscribers at cost plus a small handling and mailing charge:

Black Fiberboard Binder

A durable, fiberboard binder, with *Acco*-type metal fastener for securing the BULLETINS. 35c postpaid (Canada, 45c). This binder can be used only with BULLETINS that are drilled or punched (2 holes needed).

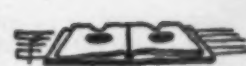
Imitation-Leather, Non-Flexible-Cover Binder

Uses simple device of straight wires for securing the BULLETINS, and does not require that they be punched or drilled. \$1.50 postpaid (Canada, \$1.75). The wire-type binder has two advantages: it permits the BULLETINS to open flat, and it reduces wear on them—important when they are much handled and frequently referred to.

Either type of binder easily holds a full year's issues of CR's BULLETINS. The fiberboard binder is thinner than the other but will hold 18 of the monthly issues.



PHONOGRAPH RECORDS



By Walter F. Grueninger

Please Note: In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended.

ORCHESTRA

Bizet: *L'Arlesienne*—Selections from Suites Nos. 1 and 2 (5 sides) & **Puccini:** *Manon Lescaut*—Intermezzo (1 side). National Symphony Orchestra (Great Britain) under Beer. English Decca Set 42. \$7.35. Warm, dramatic music. Clear, virile recording. Musicianly performance.

Interpretation AA
Fidelity of Recording AA

Bizet: *Carmen*—Suites Nos. 1 and 2. National Symphony Orchestra (Great Britain) under Fistoulari. 6 sides, English Decca Set 41. \$7.35. Magnificent recording of colorful music that appeals to nearly everybody, though some may prefer vocal recordings of certain sections. Played with becoming restraint, in contrast to Stokowski's lengthier, exaggerated RCA Victor Set 1002 which should be avoided. Beecham's Columbia Set MX 144 (\$3.35) offers a sensitive performance, excellently recorded, of much of this music.

Interpretation AA
Fidelity of Recording AA

Tchaikovsky: *Rome and Juliet* (5 sides) & **Kabalevsky:** *Colas Breugnot*—Overture (1 side). NBC Symphony under Toscanini. RCA Victor Set 1178. \$4.75. An outstanding set. The major work, one of Tchaikovsky's finest; lively filler. Tense, virtuoso performance. Violins suffer because the recording range is not high. Good transients. Best of the competition, the splendid Koussevitzky RCA Victor Set 347, offers a more common, romantic approach, well recorded.

Interpretation AA
Fidelity of Recording AA

Tchaikovsky: *The Sleeping Beauty* Ballet-Excerpts. Stokowski and His Symphony Orchestra. 12 sides, RCA Victor Set 1205. \$8.75. Stokowski has selected only "the finest music of this beautiful and varied score." His approach is illuminating and sturdy. Recording—wide range, with pleasing reverberation, similar to the best English Decca records. Clear detail. Limited dynamic range.

Interpretation AA
Fidelity of Recording AA

CONCERTO

Bach: *Violin Concerto in A Minor*. Roman Totenberg with the Musicraft Chamber Orchestra. 4 sides, Musicraft Set 78. \$3. An admirable work performed agreeably. The soloist is warmly recorded whereas the orchestra sounds dry and hard. Noisy surfaces.

Interpretation AA
Fidelity of Recording B

Handel: *Concerto in B Flat* (Op. 4 No. 6). Marcel Grandjany (harp) and the RCA Victor Chamber Orchestra under Morel (3 sides) & **Francisque:** *Pavane and Bransles* (1 side) & **Mirchhoff:** *Aria and Rigaudon* (1 side) & **Couperin:** *Soeur Monique* (1 side). Grandjany (harp). RCA Victor Set 1201. \$4.75. A charming composition, on most occasions soloed by harpsichord or organ, played here by a remarkably dexterous harpist. Jewel of a recording. The short compositions are engaging but I deplore the fact that one is compelled to buy them to get the concerto.

Interpretation AA
Fidelity of Recording AA

Tchaikovsky: *Concerto for Violin*. Erica Morini and the Chicago Symphony Orchestra under Defauw. 8 sides, RCA Victor Set 1168. \$6. A spectacular composition played with vigor and emotion. Over 100 measures are cut out of the last movement. Adequate orchestral support. Hard, resonant recording with violin well forward. Some surfaces are audible. Though recordings by Heifetz, Milstein, Elman and Huberman may still be around, the choice simmers down to Morini and Heifetz and that depends on how you like your Tchaikovsky. Heifetz in RCA Victor Set 356 is suave, assured, polished.

Interpretation AA
Fidelity of Recording AA

CHAMBER AND INSTRUMENTAL

A Program of Organ Music. Virgil Fox (organ). 10 sides, RCA Victor Set 1177. \$7.25. This set is a joy. Exciting, virtuoso playing on the organ in the John Hays Hammond Museum. Brilliant recording. Included are "Fantasy in F Minor" by Mozart, "Prelude and Fugue in G Minor" by Dupré, "Sonata No. 1" by Mendelssohn, "Fugue à la Gigue" by Bach.

Interpretation AA
Fidelity of Recording AA

Brahms: *String Quartet in B Flat Major* (Op. 67). Guilet String Quartet. 8 sides, Vox Set 208. \$6. Third and most readily assimilated Brahms quartet. Befitting, vigorous performance recorded with little luster. Quiet surfaces, best yet from Vox.

Interpretation AA
Fidelity of Recording B

Franck: *Sonata in A Major*. Francescatti and Casadesus (violin and piano). 8 sides, Columbia Set 717. \$5.85. One of the great works for violin and piano. Performance stresses the drama. Excellent teamwork, tone and balance. Overall, best set of this work now available.

Interpretation AA
Fidelity of Recording AA

VOCAL

Bach: *Magnificat*. Robert Shaw conducting the RCA Victor Chorale and Orchestra with Soloists. 10 sides, RCA Victor Set 1182. \$6. Exuberant work composed for the Vesper Service on Christmas, 1723. Blanche Thebom is outstanding as a soloist though the others are quite satisfactory. The recording engineers do all that can be expected of them.

Interpretation AA
Fidelity of Recording AA

Berg: *Excerpts from Wozzeck*. Charlotte Boerner (soprano) with the Janssen Symphony of Los Angeles under Janssen. 4 sides, Artist Set JS 12. \$5. (Distributed by Westinghouse Electric Supply Co., Los Angeles, Calif.) Music from the 23 year old complex, atonal opera which is gaining in importance. This appears to be the only recording available of music from *Wozzeck*. Well performed. Recording satisfactory, though not so brilliant as best domestic. Plastic pressing which crackles.

Interpretation AA
Fidelity of Recording A

Mozart: *Requiem*. Tassinari, Stignani, Tagliavini, Tajo with E.I.A.R. Orchestra and Chorus under de Sabata. 16 sides, Cetra-Soria Set 101. \$15.70. A great work. Dramatic performance. Recorded in Italy but pressed here on good surfaces. Unusual echo, strings lack bite, but more important, voices are well recorded. Superior to RCA Victor Set 649.

Interpretation AA
Fidelity of Recording A

Todd Duncan Recital (baritone). 8 sides, Musicraft Set 82. \$3.75. In addition to numbers from *Porgy and Bess*, this praiseworthy set includes "Ole Man River," "The Flea," and other Duncan recital hits. The singer's voice and style are less polished than other baritones you can name but an earthy quality makes them distinctive. Excellent recording and quiet surfaces.

Interpretation AA
Fidelity of Recording AA

French Operatic Arias. Maggie Teyte (soprano). 6 sides, RCA Victor Set 1169. \$4. Principally delightful, unfamiliar 18th century opera bouffe music by Monsigny, Grétry, etc. Sung discreetly with elegant style but with an occasional high note not fully covered. Voice recording clear but small orchestra recording lacks wide range.

Interpretation AA
Fidelity of Recording A

Handel: *The Messiah*. Nash, Thomas, Suddaby, Antony, Royal Philharmonic Orchestra, Luton Choral Society and Special Choir under Sir Thomas Beecham (41 sides). In-

troductory Talk by Sir Thomas Beecham (1 side). RCA Victor Sets 1194/5. \$28.25. An uncut performance of a major sacred work recorded at the HMV Studios over a period of five months beginning February, 1947. The performance abounds with vitality so characteristic of the work of Sir Thomas who, next to Handel, emerges as the hero. Four choruses ranging from 42 to 250 voices are employed, resulting in delicacy in the intimate numbers and grandeur in the "Hallelujah Chorus." The orchestra's tone is adjusted to the soloists and chorus. Elsie Suddaby, soprano, is the weakest soloist and has a difficult time in the highest passages. Heddle Nash, tenor, is the best soloist, revealing an excellent grasp of style and nuance. The diction of the entire set is not clear but cover liner program notes help. Recording of the orchestra lacks wide range but voices are powerful, the balance is good and the chamber is sufficiently resonant, giving one the impression of hearing the performance from the rear of the hall . . . Compared with the performance under Malcolm Sargent—substantially complete, 38 sides, Columbia Set 666, \$26.70; Columbia's recording and soloists are slightly superior. Victor's choral passages come through with better focus. The main difference, however, is Sir Thomas Beecham whose genius is evident when direct comparisons of interpretation are made. Both sets are excellent but Sir Thomas tips the scale for Victor.

Interpretation AA
Fidelity of Recording A

Mascagni: L'Amico Frits—"Cherry Duet." Pia Tassinari and Ferruccio Tagliavini (soprano and tenor) (3 sides) & Act III Intermezzo. EIAR Symphony Orchestra under the Composer (1 side). Cetra-Soria Set 105. \$4.75. The excerpts presented (recorded in Italy) are the most popular from this opera which is rarely played here. The performance of both selections under the baton of the composer is first rate. Tagliavini sounds as he does from a balcony seat in the Met. Tassinari sounds pleasant when she does not force. The recording of the voices is acceptable but that of the orchestra, especially noticeable in the filler, is the poorest I have heard in a long, long time. Some surface noise. The pitch of side 4 is unsteady.

Interpretation AA
Fidelity of Recording B

Operatic Arias. Ferruccio Tagliavini (tenor). 4 sides, RCA Victor Set VO 13. \$5. First American recordings of the foremost Italian singer in our country this season. Performed are "Una Furtiva Lagrima," "Parmi Veder," "Lamento di Fédérica" and "O Paradiso." Tagliavini's flowing style and moving voice are rarely approached by other tenors nowadays. I am troubled, however, by the electronics. Has the engineer turned up the volume now and then? Has Tagliavini moved forward and backward in relation to the mike? In no other way can I account for some of the color and affectation. Nevertheless, it's an arresting performance. Pressed on nearly silent vinylite surfaces.

Interpretation AA
Fidelity of Recording A

Repeat Performance. Lily Pons (soprano). 8 sides, Columbia Set 720. \$5.85. Miss Pons is in rare form in this combination of sentiment and coloratura—"Blue Danube," "Estrelita," "Ay-Ay-Ay," etc.

Interpretation AA
Fidelity of Recording A

Wagner: Die Walküre—"Wotan's Farewell" and "Magic Fire Music." Paul Schöffler (bass-baritone) and London Symphony Orchestra under Karl Rankl. 4 sides, English Decca Set 46. \$5.25. The famous closing measures of *Die Walküre*. Decca's press release states Schöffler "is regarded as the finest operatic baritone in Germany and Austria today." His is a full, round, youthful voice lighter in texture than that of others I have heard sing the part. As for style—if he is no Schorr, who else is? On the whole, a remarkable performance. The "Fire Music" is taken rather slowly. Schöffler is too close to the mike in relation to the orchestra to give his listeners the impression of hearing the scene in the opera.

Interpretation AA
Fidelity of Recording A

LIGHT, POPULAR, AND MISCELLANEOUS

Morton Gould Showcase. Morton Gould and His Orchestra. 8 sides, Columbia Set 706. \$5.85. Gould keeps close to bounds in these arrangements, giving us an album of color-

fully orchestrated "Limehouse Blues," "Begin the Beguine," "The Peanut Vendor," etc. Superior recording in a resonant chamber.

Interpretation AA
Fidelity of Recording AA

Kostelanetz Favorites. Kostelanetz and His Orchestra. 8 sides, Columbia Set 681. \$5.85. Selections which Kostelanetz "has found to be perennially popular everywhere," include "Jalousie," "The Rosary," "Souvenir," "The Swan," etc. Over-embroidered orchestra and schmalz are obvious faults. Otherwise the set is commendable.

Interpretation AA
Fidelity of Recording AA

Love Notes from Andy Russell (singer). 8 sides, Capitol Set CD 68. \$4. "Dearly Beloved," "Don't Blame Me," "Too Marvelous" and other love numbers sung pleasantly and slowly.

Interpretation A
Fidelity of Recording A

Music by Camarata. The Kingsway Symphony Orchestra under Camarata. 6 sides, London Set LA 1. \$3.15. "Rumbalero," "Come Back to Sorrento," "Haunted Ballroom," "I Love Thee," "Gershwin Prelude." Comparisons with Kostelanetz are inevitable. Expert direction, overdressed orchestration, live recording chamber, but in the more strenuous moments recording lacks clarity. Some surfaces crackle.

Interpretation AA
Fidelity of Recording A

Music of Cole Porter. Kostelanetz and His Orchestra. 6 sides, Columbia Set 721. \$4.60. "In the Still of the Night," "I Love You," "I've Got You Under My Skin," etc., in the usual lush Kostelanetz orchestration and lifelike recording.

Interpretation AA
Fidelity of Recording AA

Busy Fingers. The Three Suns (novelty trio). 8 sides, RCA Victor Set P 206. \$4. "Dancing Tambourine," "Stumbling," "Doll Dance," "Nola," etc., played by experts.

Interpretation AA
Fidelity of Recording AA

Duchin Plays Tchaikovsky (piano, orchestra & chorus). 8 sides, Columbia Set C 154. \$3.75. Dance tempo arrangements, featuring piano, of Tchaikovsky melodies. Of its kind, good.

Interpretation AA
Fidelity of Recording AA

New Orleans Jazz. Featuring Irving Fazola and His Dixieland Band. 8 sides, RCA Victor Set H J 12. \$4. Dixieland style presented by a newly recorded quartet which knows what it's about.

Interpretation AA
Fidelity of Recording A

Sentimental Journey. Les Brown and His Orchestra. 8 sides, Columbia Set C 131. \$3.75. "The best of Les" has been gathered for this set for dancing or listening. It's good.

Interpretation AA
Fidelity of Recording A

The Three Suns Present—8 sides, RCA Victor Set P 185. \$4. An organ, accordion and guitar play eight swell tunes to the critic's taste—"When Day is Done," "Deep Purple," "Hindustan," "Dardenella," etc.

Interpretation AA
Fidelity of Recording A

Rumba de Cuba. Chuy Reyes and His Hollywood Mocombo Orchestra. 8 sides, Capitol Set BD 74. \$4. Reyes plays conservatively which makes for enduring pleasure. Included are "Almendra," "Negra Leono," "La Ultima Noche," etc. Well recorded though not widest range.

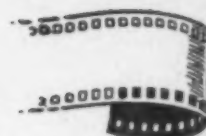
Interpretation AA
Fidelity of Recording A

Smash Hits from Broadway Shows. Marion Bell (soprano) Jimmy Carroll (tenor). 8 sides, RCA Victor Set P 205. \$4. Marion Bell's voice is pleasant, reedy, and clear whereas Jimmy Carroll's is light but round and full. Some solos, some duets, all sung in good taste though dragged now and then. Included are "People Will Say," "Glocca Morra," "If I Loved You," "Strange Music," etc.

Interpretation AA
Fidelity of Recording AA



Ratings of Motion Pictures



THIS section aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade press, leading newspapers and magazines—some 19 different periodicals in all. The motion picture ratings which follow thus do not represent the judgment of a single person, but are based on an analysis of critics' reviews.

The sources of the reviews are:

Box Office, Charm, Chicago Daily Tribune, The Christian Century, Cue, Daily News (N.Y.), The Exhibitor, Harrison's Reports, Motion Picture Herald, National Legion of Decency List, Newsweek, New York Herald Tribune, New York Times, Parents' Magazine, Release of the D.A.R. Preview Committee, Successful Farming, Time, Variety (weekly), and Unbiased Opinions of Current Motion Pictures which includes reviews by the General Federation of Women's Clubs, the American Legion Auxiliary, National Film Music Council, and others.

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), or C (not recommended) on its entertainment values.

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

adv—adventure	hist—founded on historical incident
biog—biography	mel—melodrama
c—in color (Technicolor, Cinecolor, Trucolor, Magnacolor, Vitacolor, etc.)	mus—musical
car—cartoon	mys—mystery
com—comedy	nov—dramatization of a novel
cri—crime and capture of criminals	rom—romance
doc—documentary	soc—social-problem drama
dr—drama	trav—travelogue
fan—fantasy	war—dealing with the lives of people in wartime
	wes—western

A	B	C		
—	5	4	Adventures of Casanova	adv A
—	3	—	Adventures in Silverado	wes AYC
—	7	7	Albuquerque	wes-c A
—	3	4	Alias a Gentleman	com A
1	6	7	All My Sons	dr A
—	5	9	Always Together	com A
—	—	—	An Ideal Husband	
—	3	3	(See Ideal Husband, An)	
—	3	3	Angelina	propaganda-dr A
—	4	1	Angela's Alley	com AYC
—	1	2	Anna Karenina	dr A
—	2	2	Another Part of the Forest	dr A
—	3	2	Antoine et Antoinette	com A
—	4	7	April Showers	mus-com A
1	1	8	Arch of Triumph	war-dr A
—	5	6	Are You With It?	mus-com AY
—	3	—	Argyle Secrets, The	cri-mel A
—	4	—	Arizona Ranger, The	wes A
—	2	2	Arthur Takes Over	com A
—	4	1	Bandits of Dark Canyon	wes AYC
—	8	—	Beauty and the Beast	fan A
—	5	—	Berlin Express	war-mel AY
—	3	6	Beware of Pity	dr A
2	4	6	B. F.'s Daughter	nov A
1	4	2	Big City	mus-dr AYC
4	8	1	Big Clock, The	cri-mel A
—	4	5	Big Town After Dark	cri-mel A
—	12	1	Bill and Co.	com-c YC
1	12	3	Bishop's Wife, The	fan A
—	3	10	Black Bart	wes-c AY
—	2	2	Black Hills	mus-wes AYC
—	1	5	Blonde Savage	adv AY
—	3	2	Blondie's Anniversary	com AYC
—	—	5	Bohemian Rapture	mus-biog A

A	B	C		
—	4	2	Bride Goes Wild, The	com A
—	—	7	Buckaroo from Powder River	mus-wes AYC
1	12	1	Bush Christmas	mel YC
—	4	2	Caged Fury	mel AY
—	2	1	California Firebrand	mus-wes-c AYC
2	13	2	Call Northside 777	doc-mel A
—	5	3	Campus Honeymoon	mus-com A
1	10	2	Captain Boycott	hist-dr A
1	10	5	Captain from Castile	hist-dr-c A
—	3	4	Carnival of Sinners	dr A
—	—	—	Cary and the Bishop's Wife	
—	3	3	(See Bishop's Wife, The)	
2	11	2	Casbah	mus-mel A
—	2	1	Cass Timberlane	nov A
—	6	1	Cavalleria Rusticana	mus-dr A
—	3	1	Challenge, The	mys-mel AY
—	4	1	Check Your Guns	mus-wes AYC
—	3	2	Cheyenne Takes Over	wes AYC
—	1	6	Chinese Ring, The	mys-mel AYC
—	3	—	Close-Up	war-mel A
—	2	3	Confessions of a Rogue	com A
—	9	6	Crime and Punishment	dr A
—	3	4	Daisy Kenyon	dr A
—	2	1	Dangerous Years	mel AYC
—	5	—	Dear Murderer	cri-mel A
—	2	12	Design for Death	war-doc A
—	—	7	Devil Ship	mel A
—	1	3	Devil's Cargo	mys-mel A
—	5	—	Docks of New Orleans	cri-mel AY
3	13	1	Double Life, A	dr A
—	—	3	Dreams That Money Can Buy	fan-c A
—	5	4	Driftwood	dr AYC
—	1	6	Elixir of Love	mus-dr A
—	1	5	Enchanted Valley, The	dr-c YC
1	3	8	Escape Me Never	dr A
1	5	3	Eternal Return, The	dr A
—	8	4	Exile, The	hist-dr AY
—	6	4	Fabulous Texan, The	mel A
1	6	1	Fanny	dr A
—	4	1	Farrebique	dr A
—	5	1	Fighting Mad	mel AY
—	1	4	Fighting Vigilantes	wes AYC
—	3	9	Flame, The	cri-mel A
—	1	3	Fledermaus, Die	mus-com-c A
—	1	3	For You I Die	mel A
3	5	12	Forever Amber	dr-c A
1	5	1	Fort Apache	wes AYC
—	1	3	French Leave	com AY
2	11	5	Fugitive, The	dr A
—	6	3	Furia	mel A
—	4	1	Fury at Furnace Creek	wes AYC
—	5	1	Gay Ranchero, The	mus-wes-c AYC
4	12	3	Gentleman's Agreement	dr A
—	3	5	Glamour Girl	mus-com A
—	10	6	Good News	mus-com-c AYC
—	2	3	Great Glinka, The	mus-biog A
—	1	4	Green Dolphin Street	dr AY
—	3	—	Green Grass of Wyoming	dr-c AYC
—	1	2	Gun Talk	wes AYC
—	—	8	Half-Past Midnight	mys-mel A
—	3	3	Hawk of Powder River, The	wes AYC
—	2	5	Hazard	com A
—	3	2	Heading for Heaven	com A
—	2	3	Henry IV	hist-dr A
—	2	5	Here Comes Trouble	com-c A
1	8	6	High Wall	mel A
—	10	—	Holiday Camp	com A
—	1	4	Homecoming	war-dr A
—	4	1	Hunted, The	mel A
—	3	4	I Became a Criminal	cri-mel A
—	6	3	I Love Trouble	mys-mel A

A	B	C	
4	8	—	I Remember Mama.....com AYC
—	5	11	I Walk Alone.....cri-mel A
1	5	8	Ideal Husband, An.....com-c A
—	2	4	Idiot, The.....dr A
1	6	5	If You Knew Susie.....mus-com AYC
—	9	8	If Winter Comes.....dr A
—	3	1	In Self Defense.....mel A
—	3	1	Inside Story, The.....com AYC
—	2	8	Intrigue.....mel A
1	2	1	Iron Curtain, The.....doc-mel AYC
1	6	10	It Had to Be You.....com A
—	2	13	Jassy.....nov-c A
1	5	1	Jenny Lamour.....mus-mel A
—	3	2	Jiggs and Maggie in Society.....com AY
1	9	5	Killer McCoy.....mel A
—	—	3	King of the Bandits.....wes AYC
—	4	2	Lady from Shanghai, The.....mys-mel A
—	3	3	Last Days of Boot Hill.....mus-wes AYC
—	4	3	Let's Live Again.....com A
—	1	4	Letter from an Unknown Woman.....com A
—	1	3	Lightnin' in the Forest.....cri-com A
—	1	5	Linda Be Good.....mus-com A
2	4	1	Lost One, The.....mus-dr A
—	5	9	Love from a Stranger.....cri-mel A
—	4	2	Lover's Return, A.....com A
—	1	2	Lucia di Lammermoor.....mus-dr A
—	1	3	Lucky Bride, The.....mus-com A
—	2	5	Madonna of the Desert.....mel AY
—	1	7	Main Street Kid, The.....com AY
—	11	5	Man About Town.....com A
—	1	4	Man from Texas, The.....wes A
—	1	12	Man of Evil.....mel A
—	1	5	Mary Lou.....mus-com AY
—	5	3	Mating of Millie, The.....com AY
—	3	2	Meet Me at Dawn.....com A
—	7	5	Miracle Can Happen, A.....com A
3	4	6	Miracle of the Bells.....dr AYC
—	2	2	Money Madness.....cri-mel AY
—	5	9	Mourning Becomes Electra.....dr A
1	8	2	Mr. Blandings Builds His Dream House.....com A
—	3	2	Mr. Orchid.....war-dr A
—	—	7	Mr. Reckless.....mel A
2	6	6	My Girl Tisa.....dr AY
—	11	3	My Wild Irish Rose.....mus-biog-c AY
6	6	2	Naked City, The.....mel A
—	9	7	Nicholas Nickleby.....nov AY
—	7	11	Night Song.....mus-dr A
—	6	13	Nightmare Alley.....mel A
—	5	1	Noose Hangs High, The.....com AYC
—	5	5	October Man, The.....cri-mys A
—	2	2	Oklahoma Badlands.....wes AYC
—	1	2	Old Los Angeles.....mus-wes AYC
—	7	1	On the Old Spanish Trail.....mus-wes-c AYC
—	3	6	Open Secret.....mel A
—	7	10	Out of the Past.....mys-mel A
—	1	2	Overland Trails.....wes AYC
1	6	2	Palsan.....war-dr A
—	8	1	Panhandle.....wes-c A
2	5	2	Panic.....cri-mel A
1	10	4	Paradine Case, The.....mys-mel A
—	1	3	Passionelle.....dr A
1	7	3	Pearl, The.....dr A
—	2	3	Piccadilly Incident.....war-dr A
1	3	1	Pirate, The.....mus-dr-c A
—	5	10	Pirates of Monterey.....mel-c A
—	—	4	Prairie Express.....wes AYC
—	1	2	Prairie Raiders.....mus-wes AYC
—	5	5	Prince of Thieves, The.....hist-dr-c AYC
—	5	2	Raven, The.....mys-mel A
—	14	—	Relentless.....wes-c AY
—	3	3	Return of Rin Tin Tin.....dr-c YC
—	1	4	Return of the Lash.....wes AYC
—	5	4	Return of the Whistler, The.....mys-mel AYC
—	4	1	Revenge.....war-dr A
1	16	—	Road to Rio.....mus-com AY
—	—	4	Road to the Big House.....mel A
—	1	2	Robin Hood of Monterey.....wes AYC

A	B	C	
—	3	1	Rose of Santa Rosa.....mus-com AYC
—	3	5	Roses Are Red.....cri-mel A
—	—	3	Rossini.....mus-biog A
—	4	4	Ruthless.....dr A
—	3	10	Saigon.....mel A
—	3	4	"Sainted" Sisters, The.....dr A
—	7	3	Scudda-Hoo! Scudda-Hay!.....nov-c AYC
3	8	3	Search, The.....war-dr AY
—	3	9	Secret Beyond the Door.....mel A
—	17	2	Senator Was Indiscreet, The.....com A
—	1	3	Shadow Valley.....mus-wes AYC
—	—	4	Shaggy.....dr-c AYC
—	3	3	Shakuntala.....dr A
—	7	10	Sign of the Ram, The.....dr A
—	—	3	Silent Conflict.....wes AYC
3	10	—	Sitting Pretty.....com A
—	2	2	Six-Gun Law.....mus-wes AYC
—	11	6	Sleep, My Love.....cri-mel A
—	4	4	Slippy McGee.....dr AYC
—	1	2	Smart Politics.....mus-com AY
—	6	1	Smart Woman.....dr A
—	2	1	Smoky River Serenade.....mus-wes AYC
—	5	6	Smugglers, The.....mel-c A
1	11	6	So Well Remembered.....war-dr A
—	1	3	Son of the Regiment.....war-dr A
2	6	3	Song of My Heart.....mus-dr AYC
—	2	4	Speed to Spare.....mel A
—	1	2	Spring.....mus-com A
—	1	4	Stage to Mesa City.....wes AYC
3	6	1	State of the Union.....dr A
—	5	1	Story of Tosca, The.....mus-dr A
—	1	2	Stranger from Ponca City, The.....mus-wes AYC
1	5	2	Summer Holiday.....mus-com-c A
—	10	5	Swordsman, The.....dr-c AYC
—	—	5	Symphonie Fantastique, La.....mus-biog A
2	11	2	T-Men.....doc-dr AYC
—	1	2	Take My Life.....mys-mel A
—	4	2	Tarzan and the Mermaids.....adv AYC
2	5	1	Tender Years, The.....dr AYC
—	3	6	Tenth Avenue Angel.....dr AY
—	8	6	Three Daring Daughters.....mus-com-c A
—	3	2	Thunder in the Valley.....dr-c AYC
—	2	2	Tioga Kid, The.....mus-wes AYC
3	8	—	To Live in Peace.....war-mel AY
1	13	2	To the Ends of the Earth.....doc-mel AY
—	4	5	To the Victor.....war-mel A
—	—	4	Tornado Range.....mus-wes AYC
4	7	4	Treasure of the Sierra Madre, The.....dr A
—	—	4	Twins.....com A
—	2	5	Two Blondes and a Redhead.....mus-com A
—	8	8	Tycoon.....mel-c AYC
—	8	7	Unconquered.....hist-c A
—	3	1	Under Colorado Skies.....wes-c AYC
—	3	5	Untamed Fury.....mel A
—	3	10	Upturned Glass, The.....cri-dr A
—	—	5	Vacation Days.....mus-wes AYC
1	12	3	Voice of the Turtle, The.....com A
—	8	2	Volpone.....com A
—	3	1	Voyage Surprise.....com AY
—	—	3	We Lived Through Buchenwald.....war-doc A
—	2	5	Western Heritage.....wes AYC
—	—	3	Westward Trail, The.....mus-wes AY
—	—	6	When a Girl's Beautiful.....mus-com A
—	11	4	Where There's Life.....com A
—	1	3	Whispering City.....cri-mel A
—	—	3	White Stallion.....wes AYC
—	2	3	Wild Frontier, The.....wes AYC
—	4	2	Wild Horse Mesa.....mus-wes AYC
—	2	3	Winner, The.....mus-dr A
—	2	8	Winter Meeting.....dr A
—	9	3	Wistful Widow of Wagon Gap, The.....com A
—	1	5	Woman from Tangier, The.....mel A
—	3	—	Woman in White, The.....cri-mel A
11	6	—	Woman's Vengeance, A.....mel A
—	1	6	Women in the Night.....war-mel A
—	3	3	Wreck of the Hesperus, The.....dr AYC
—	11	5	You Were Meant for Me.....mus-com AY
—	1	3	Zygmunt Kolosowski.....war-dr A

The image shows a dark, textured surface, likely the cover or endpaper of an old book. The texture is marbled, with a complex pattern of swirling, irregular shapes in shades of dark brown, black, and light grey. The pattern is dense and organic. Along the left edge, there is a vertical strip of lighter, off-white material, which appears to be the binding or spine area of the book. This strip contains some faint, vertical text, which is partially obscured and difficult to read, but it seems to be a library or archival identification number. The overall appearance is aged and historical.

The Consumers' Observation Post

(Continued from page 4)

TOOTH PASTES AND POWDERS, once considered so important for dental hygiene, are now held by Dr. Charles F. Bodecker, professor emeritus of Columbia University School of Dental and Oral Surgery, to be a possible factor in starting dental decay in the teeth of young people. Dr. Bodecker believes that dentifrices with a content of highly alkaline ingredients foster the growth of one group of tooth destroying germs. He also suggests that homemade dentifrices based on the use of baking soda may be objectionable, but common table salt, sometimes used on the toothbrush, apparently escapes Dr. Bodecker's censure.

* * *

SEPTIC TANKS are of much interest to many consumers who live in the country or have a summer home where there is no municipal sewage disposal system. The Small Homes Council of the University of Illinois has issued a well-organized and illustrated leaflet on "Septic-Tank Systems," Circular G5.5, prepared by a board of editors connected with the University of Illinois and the Illinois Department of Public Health. This circular is available without charge from Small Homes Council, Mumford House, University of Illinois, Urbana.

* * *

FUEL OIL STORAGE TANKS made of aluminum are making their appearance in some parts of the country. The present demand for steel is so great that there have not been sufficient supplies to take care of production of the large num-

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THOSE who place their orders now may expect that their copies will be mailed the latter part of September, as soon as the ACB is off the press. Since the Annual Cumulative Bulletin is a confidential issue, it is available only to individuals, for their personal use and that of their immediate families. (Sorry, no school or library orders.)



READY IN OCTOBER

PLEASE TURN THE PAGE FOR A CONVENIENT ORDER BLANK.

ber of steel tanks needed; thus at least two manufacturers are now making tanks of aluminum, according to Fueloil and Oil Heat. Aluminum tanks have been approved by the State Fire Marshall of Massachusetts but have not yet been approved by the Underwriters' Laboratories, the national fire-safety testing laboratory sponsored by a major group of insurance companies.

* * *

SOLUBLE COFFEE has been making its appearance on the market under many brand names. One type, such as G. Washington Instant Coffee, is the 100% pure coffee extract, the other, such as Nescafe, consists of coffee extract with added carbohydrates (dextrins, maltose, and dextrose). In tests made for CR in 1945, none was found to provide a beverage which had the aroma and flavor of a good cup of coffee made from freshly-ground, freshly-roasted beans. It was also found that frequently greater amounts than called for in the directions on the label of soluble coffees were required to obtain a palatable beverage, though doubtless there is some variation in tastes in this respect. Some time ago, CR had the caffeine content of several brands checked for comparison with that of the average cup of freshly made beverage which varies from 1 to 3-1/2 grains per cup depending on the amount and type of coffee used and method of making. In spite of directions on the label, it was found necessary to use 1 teaspoonful of soluble coffee per cup in each case to obtain satisfactory flavor. The caffeine content was not found uniform in any brand, but in general, Kellogg's Frozen Flavor Instant All-Coffee showed about one percent, Barrington Hall Pure Instantly Prepared Coffee about three-fourths of one percent, Instant Maxwell House Coffee and Nescafe each about one-half of one percent. A sample of G. Washington's Instant Coffee purchased in Canada and presumably not made in the American plant, showed over one percent caffeine, while a sample of the same brand purchased in the United States had only one-third of a percent. It appears that on the average the soluble coffees will supply less caffeine per cup than the freshly made beverage.

* * *

RECENTLY TESTED:

Dryzol Shoe Waterproofer for soles (\$1 for 7-oz. jar; sold by Resol Prod. Mfg. Co., New York 35) was recently analyzed and found to consist of 37% deodorized kerosene, 47% paraffin, and 16% aluminum soap. This product was found to be effective in waterproofing soles, but it must be borne in mind that waterproofing of soles, if complete, makes leather soles subject to the same disadvantage which is produced by the durable and waterproof composition soles such as Neolite, in that the loss of porosity of the leather prevents the shoe from "breathing" as freely as normally, so that the effect may be to make the feet too hot in mild or warm weather.

Consumers' Research, Inc. Washington, N. J.

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Off the Editor's Chest

(Continued from page 2)

signed, newly-manufactured car are considerably greater, for he has no previous experience or precedent to guide him, and lacks the tools and specific instructions that are most helpful to dealers of the old-line manufacturers. As a result, one CR consultant reports, dealers handling at least one of these new cars are loaded down with far more "conditioning for delivery" than normal, and only recently has the factory been able to give them any real help in the matter of providing instructions, tools, and parts. In many cases they have just not been properly equipped to service cars with numerous defects, either before or after delivery.

All manufacturing jobs of the magnitude of an automobile need at least a year for reworking on the basis of service experience, and often the eager consumer pays a high price both in cash and unsatisfactory performance for being one of the first enthusiastic purchasers of something new and unusual in a motor car. It should be noted that this observation applies not only to automobiles, but to radio and television sets, vacuum cleaners, automatic washing machines, and a number of other complex, costly appliances.

Established, old-line manufacturers, too, have their troubles, but the difficulties with established makes of cars are somewhat different from those occurring in cars of new design. Usually the difficulties with a car that has been tried in the crucible of experience relate to such factors as undue wear of some part, unduly short life of piston rings, or gears, or some other element; or matters such as bearing wear, valve quality, unexpected weakness of some new minor material or device, the nature of the protection given certain parts against corrosion, etc. Serious troubles are more likely by far to occur in the cars of manufacturers who are given to producing radically new or different designs each year, or who may lack previous experience in manufacturing or servicing a car containing many new or out-of-the-ordinary design details.

The old-line manufacturers often use innovations, too, but they are commonly changes of a kind which are not too critical in their effect, if anything goes wrong. The new manufacturer and the smaller manufacturer may have troubles that are due not only to faults of new designs, but also to immaturity or untested quality of the previous design. The more frequently and drastically a car manufacturer tends to change his models, the more likely it is that the dual sort of troubles may be a problem. If his changes are frequent and drastic, he never gets around to passing on the benefits of his ex-

perience with an unsuccessful detail to his customers; he is too busy finishing and promoting some *new* feature, on which he also lacks experience. From the standpoint of the consumer who is concerned chiefly with reliability and dependable performance, the best automobile is likely to be the one whose manufacturer makes the least change from year to year beyond the changes required to correct the faults of last year's models.

Although such a manufacturer may make mistakes that are troublesome, they are not likely to be of the sort that leave the car owner with the feeling that he has made a woefully bad investment, which is what may happen with the purchase of one of the less substantial or less-tried makes. Anyone who doubts this will do well to recall that there have been a total of more than 1500 makes of automobiles sold in the U. S. in previous years, and less than 2 percent, a very small proportion of them, have survived the test of time and consumer acceptance. Of nearly 200 companies which reached the stage of actual production of motor cars, nearly 170 encountered difficulties and passed out of existence, before 1936. Today the number of active "makes" is only about 20.

History will repeat itself; there are being produced today—and there will still be produced, next year and the next—cars that will be as serious failures from the standpoint of giving permanent satisfaction as some of the more than 1500 odd "makes" of cars that have been born and died since the beginnings of large scale automobile manufacture a few years after the turn of the century.

There will always be people who are so interested in novelty and innovation so that they will buy a new car as a woman buys a new hat, for appearance, style, eye-catching quality, or swank. Any prospective purchaser who wants to be the first to own a new or exceptional design must be prepared to pay the price for being a guinea pig for the manufacturer's development work. Those who learned during the war years to rate performance and economy above all other factors will be more cautious in making their purchase of a new car; the possible imminence of another war or at least of a period of preparation for war, which may close down automobile plants and put at least some of them back at armament production, should be sufficient reason for many to whom cost is a matter of importance, to play safe in their buying of a new car and not put too much trust in the glib advertiser who plays up novelty and innovation above the tests of time and experience.

